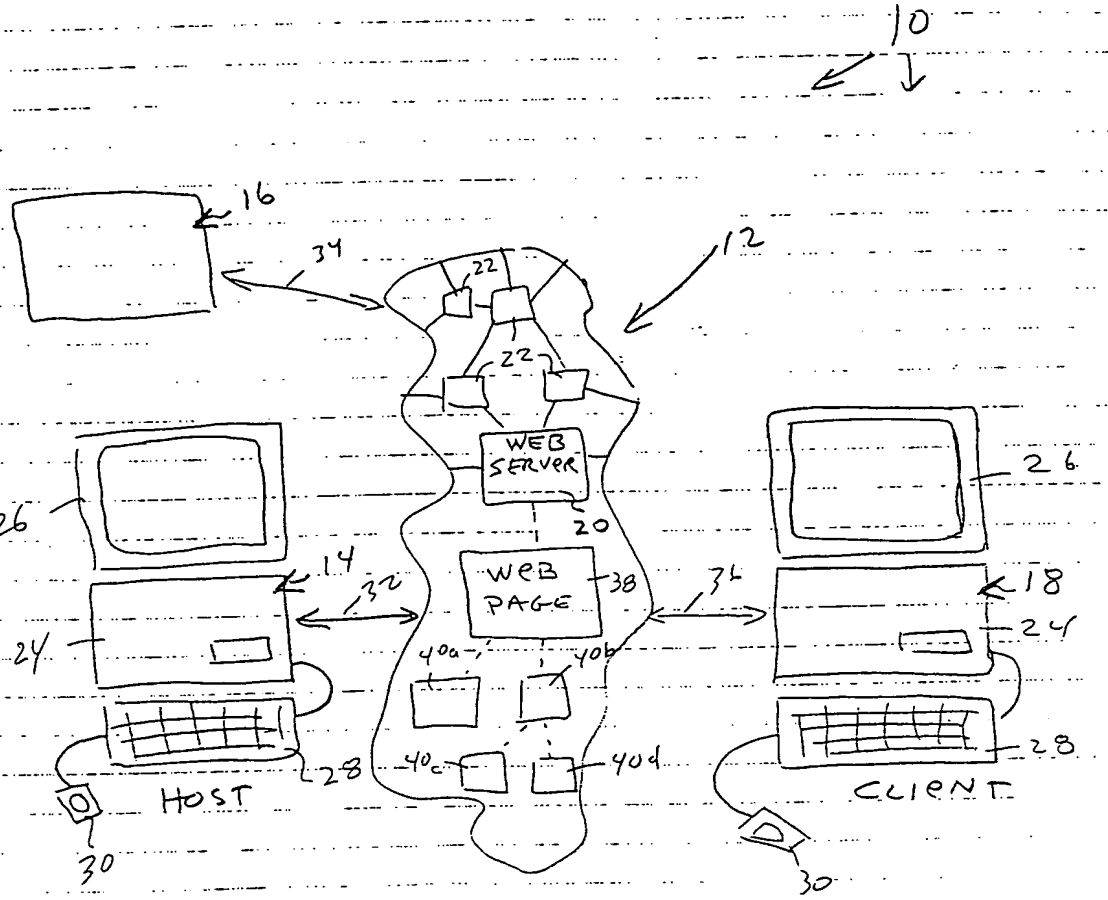

10
16
34
12
22
22
WEB SERVER
20
26
26
14
32
WEB PAGE
38
34
18
24
24
40a
40b
40c
40d
28
28
HOST
CLIENT
30
30

Fig. 1

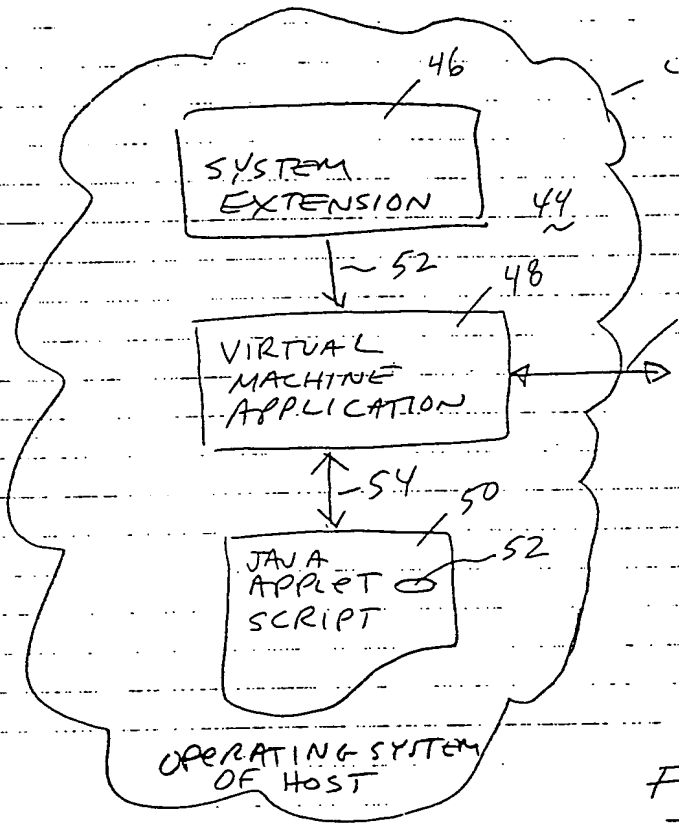

46
42
SYSTEM EXTENSION
44
52
48
32
VIRTUAL MACHINE APPLICATION
54
50
52
JAVA APPLET SCRIPT
OPERATING SYSTEM OF HOST

Fig. 2

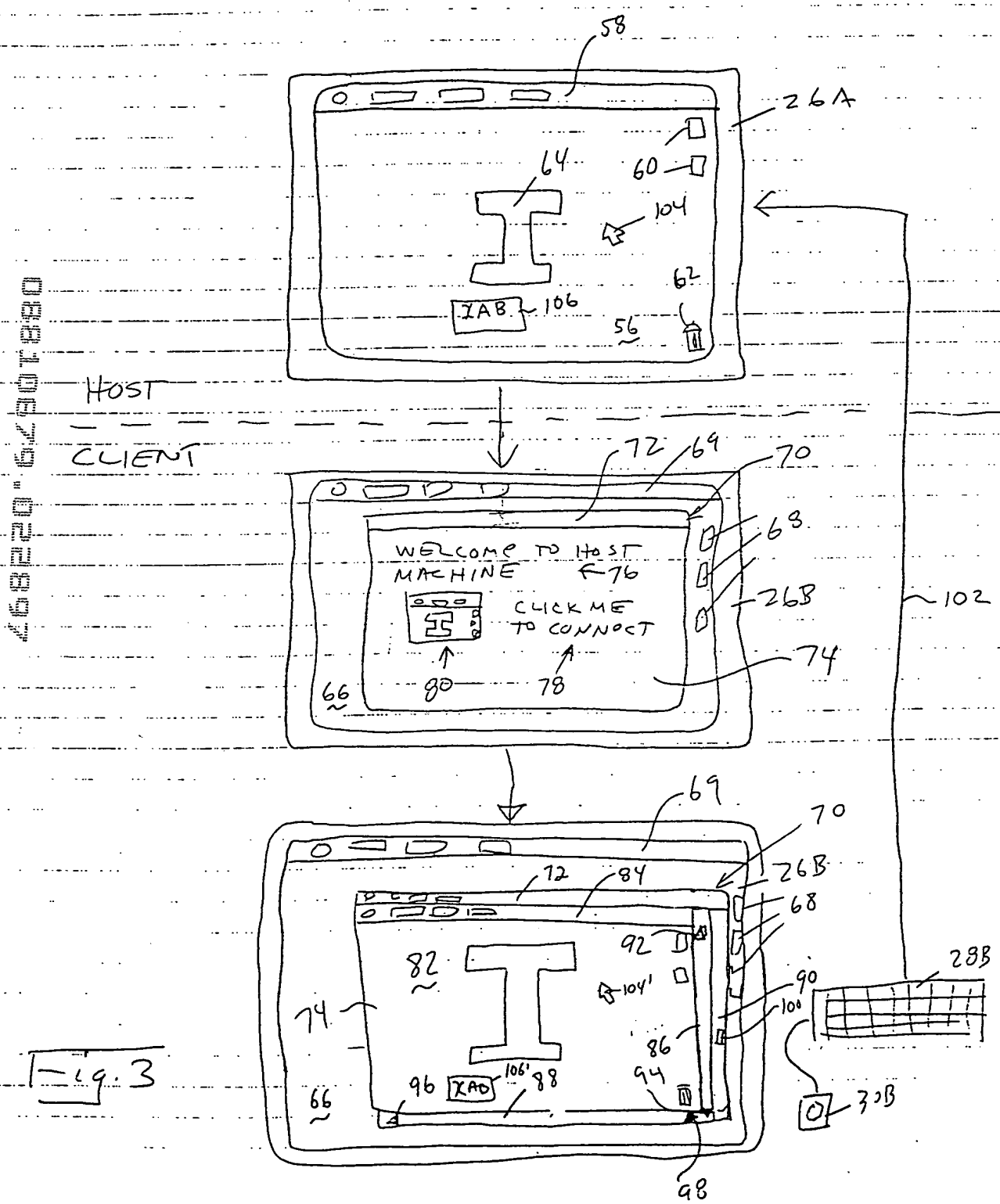

58
26A
64
60
104
62
IAB
106
56
HOST
CLIENT
72
69
70
WELCOME TO HOST MACHINE
76
68
26B
102
CLICK ME TO CONNECT
74
80
78
66
69
70
72
84
26B
68
92
82
104'
90
100
28B
74
86
96
XAD
106'
88
94
66
30B
98

Fig. 3

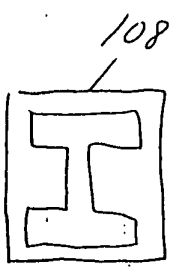


Fig 3a

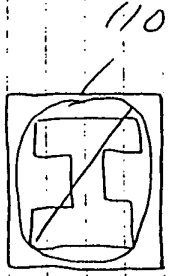


Fig 3b

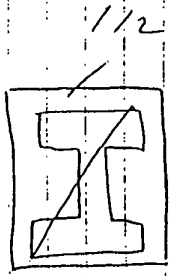


Fig 3c

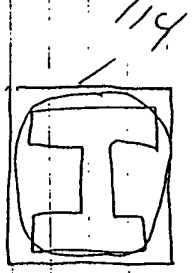


Fig 3d

2682201 8290880

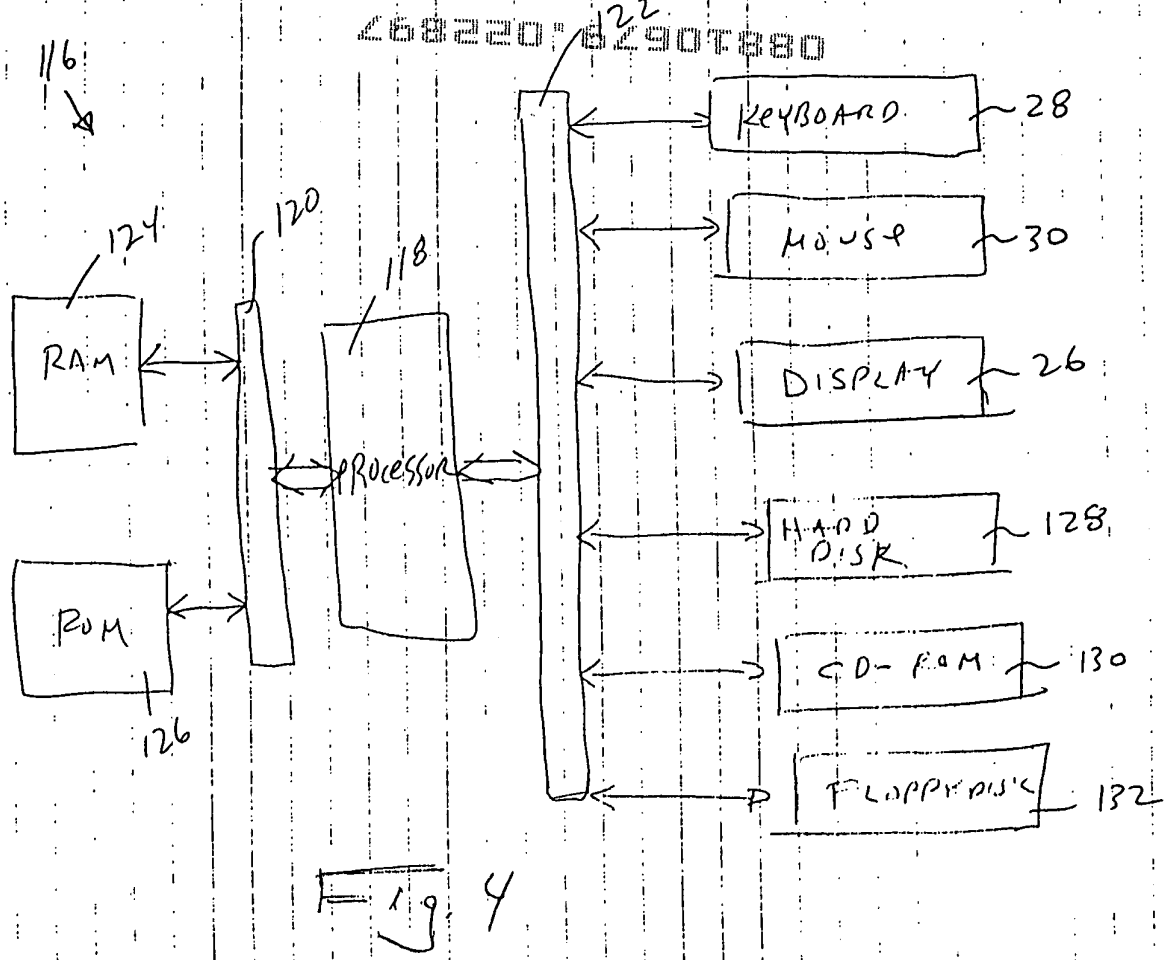


Fig. 4

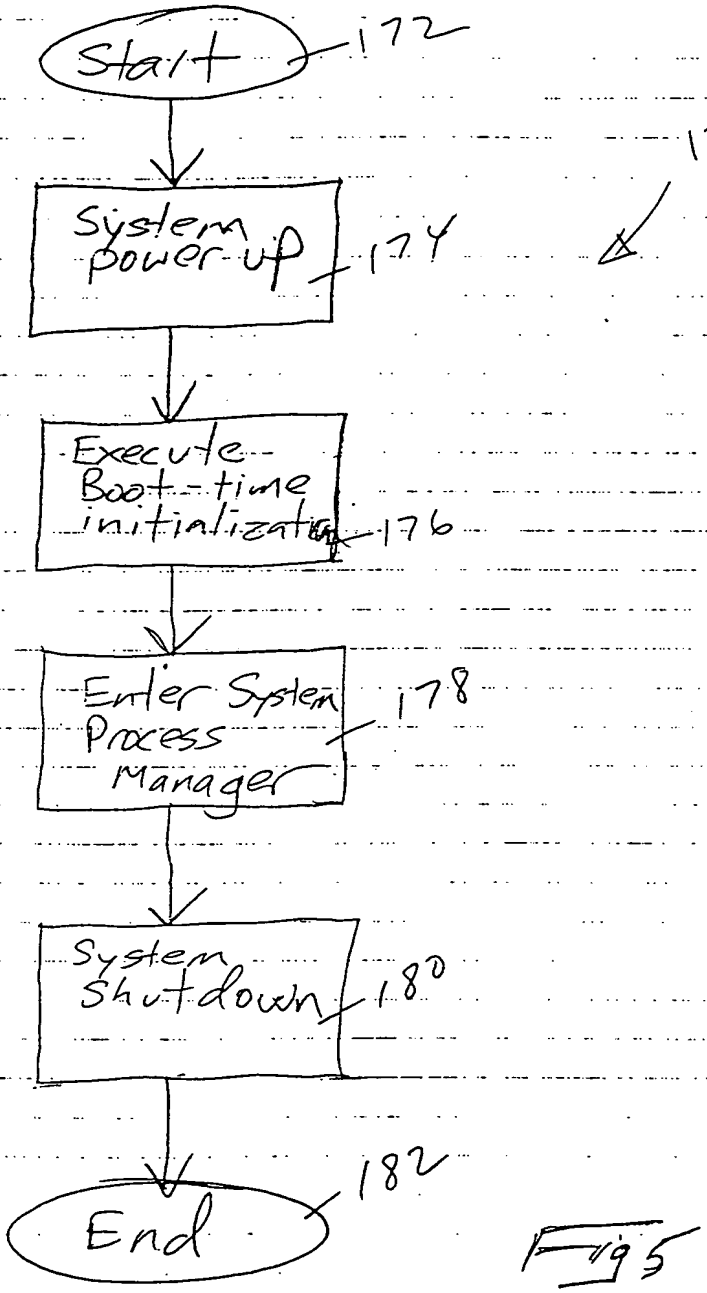

Start
172
170
System power-up
174
Execute Boot-time initialization
176
Enter System Process Manager
178
System Shutdown
180
End
182

Fig 5

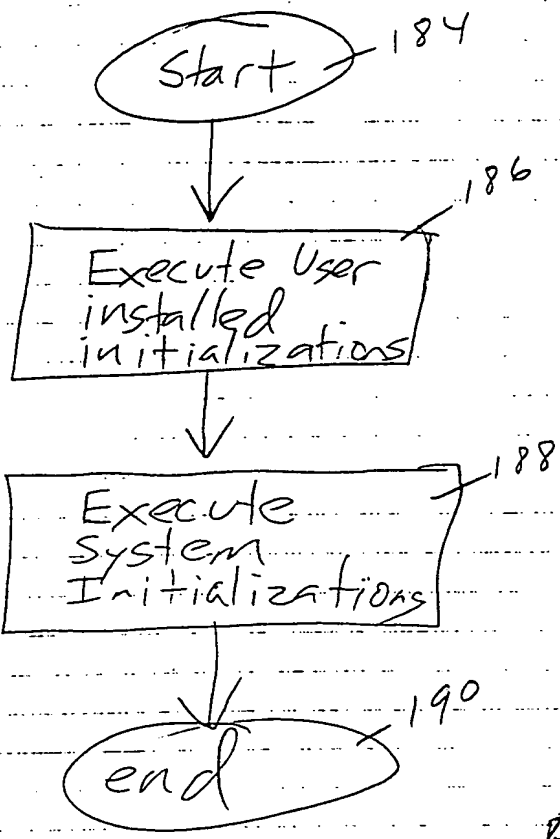
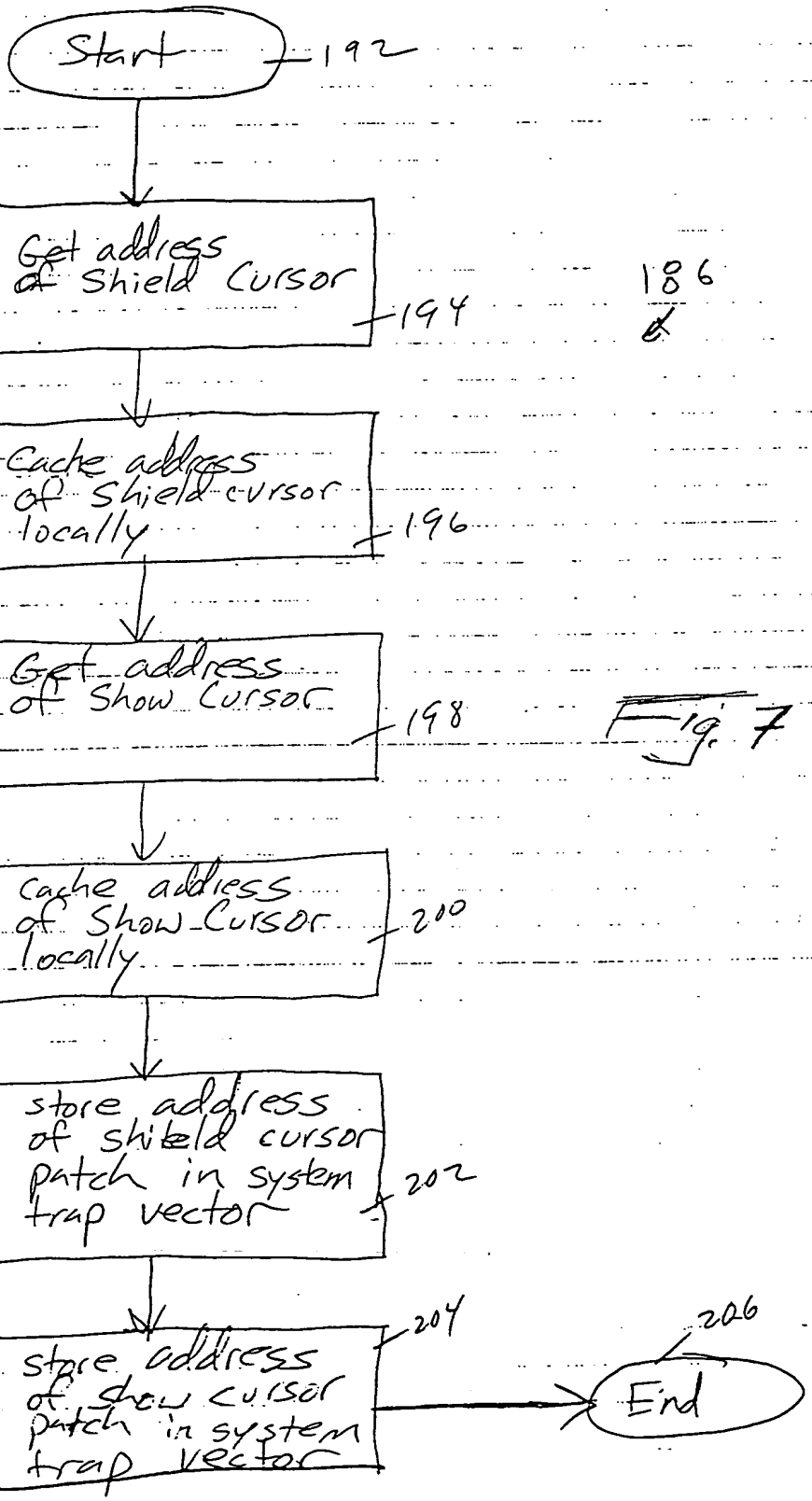


Fig. 6

Docket No. 9-98-0026



186

Fig. 7

08870570-022804

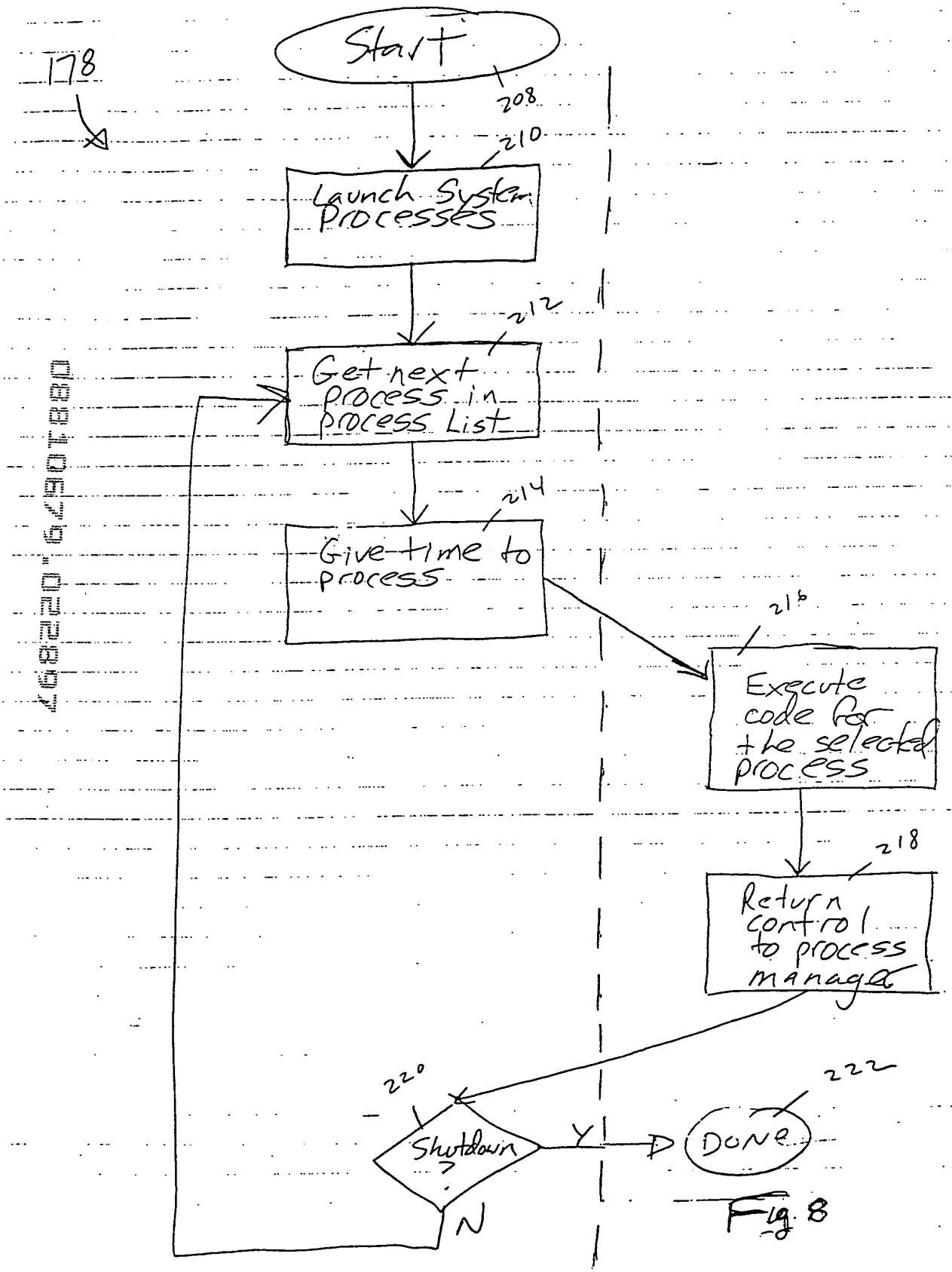

178
Start
208
210
Launch System Processes
212
Get next process in process List
214
Give time to process
216
Execute code for the selected process
218
Return control to process manager
220
Shutdown ?
Y
N
222
DONE

Fig. 8

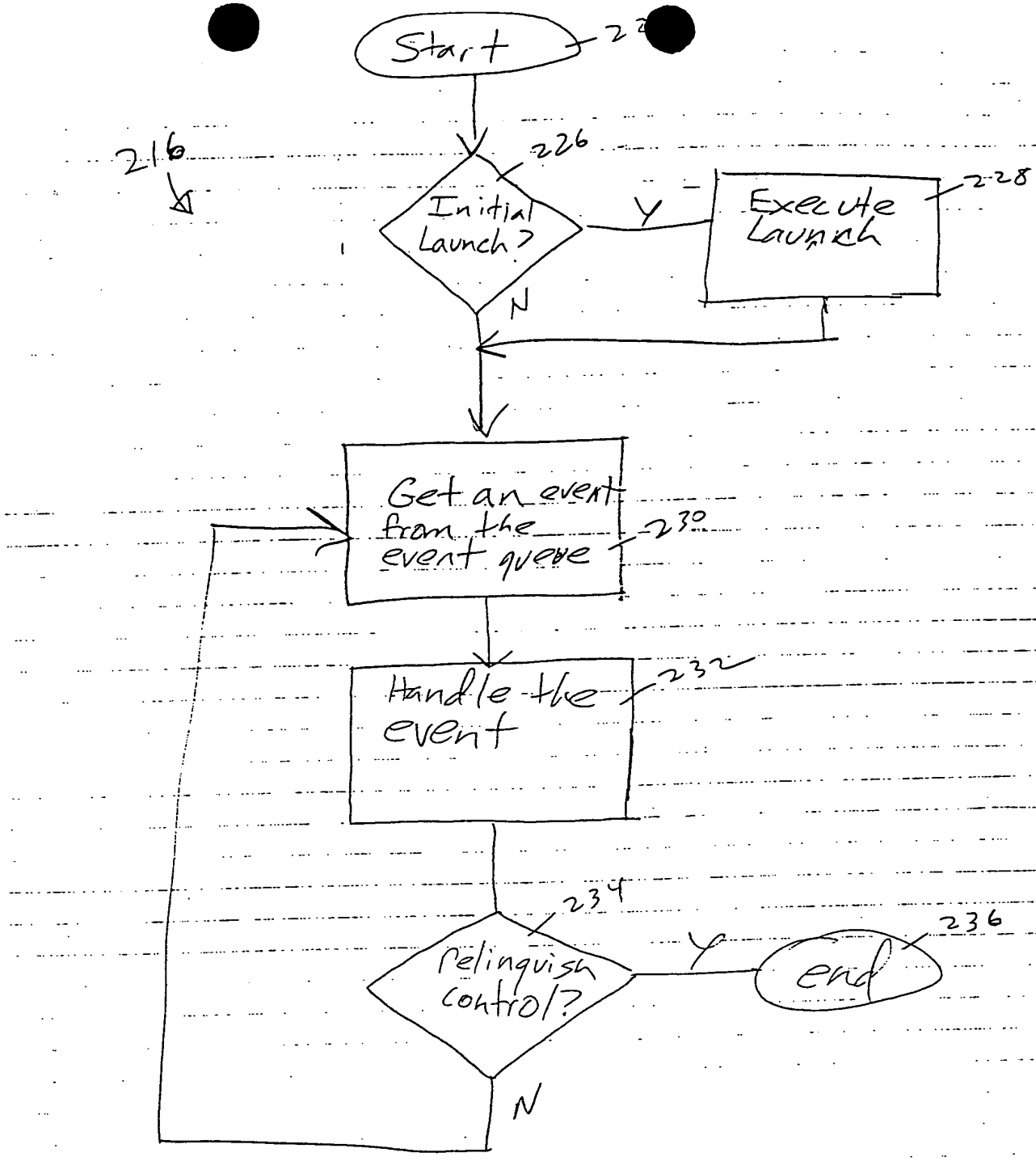


Fig 9

08/06/2002, 09/887,980

08/902,969 - 02/28/89

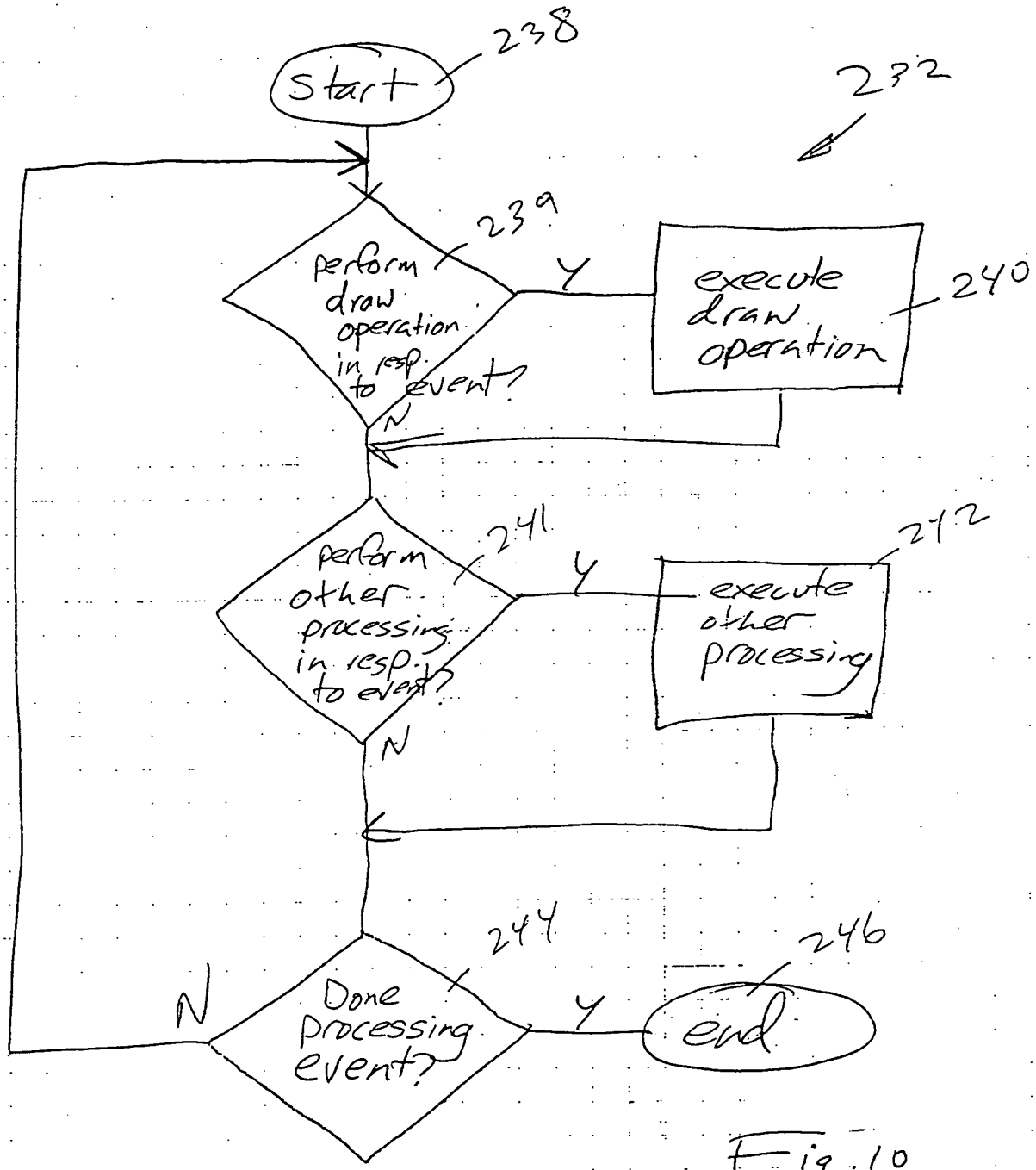


Fig. 10

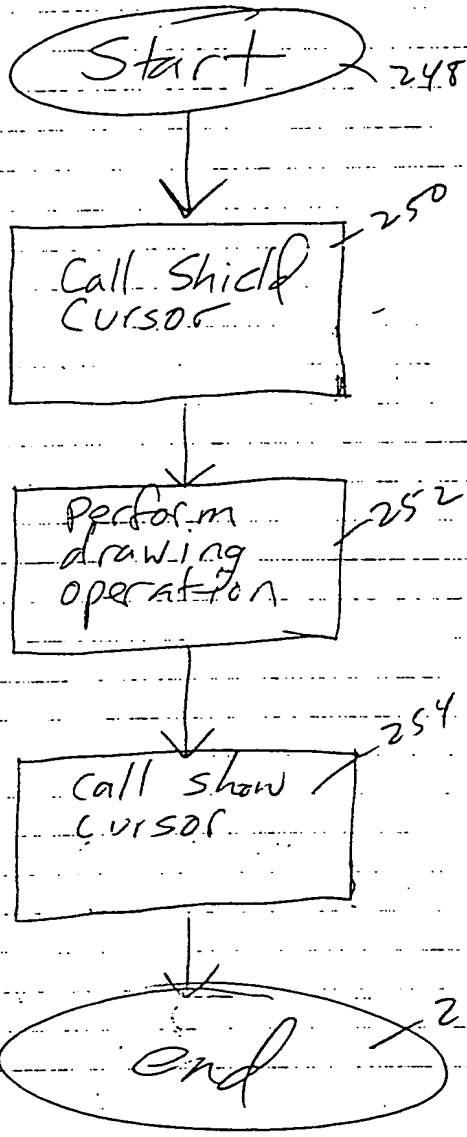

Start
248
240
250
Call Shield Cursor
252
Perform drawing operation
254
Call show cursor
256
end

Fig 11

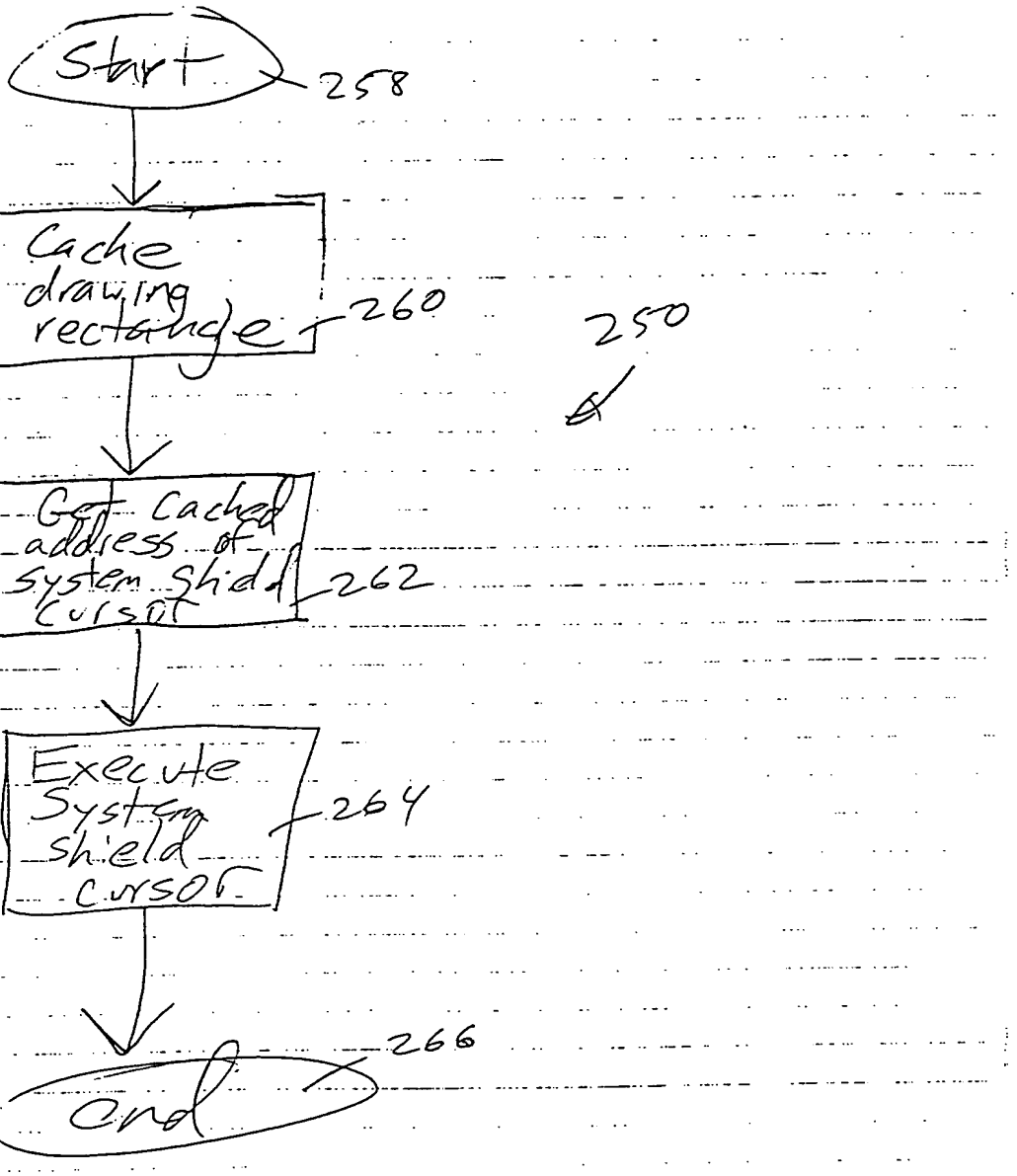

Start
258
Cache drawing rectangle
260
250
Get Cached address of system shield cursor
262
Execute System shield cursor
264
End
266

Fig. 17

08/28/96 16:09:08 96-0808

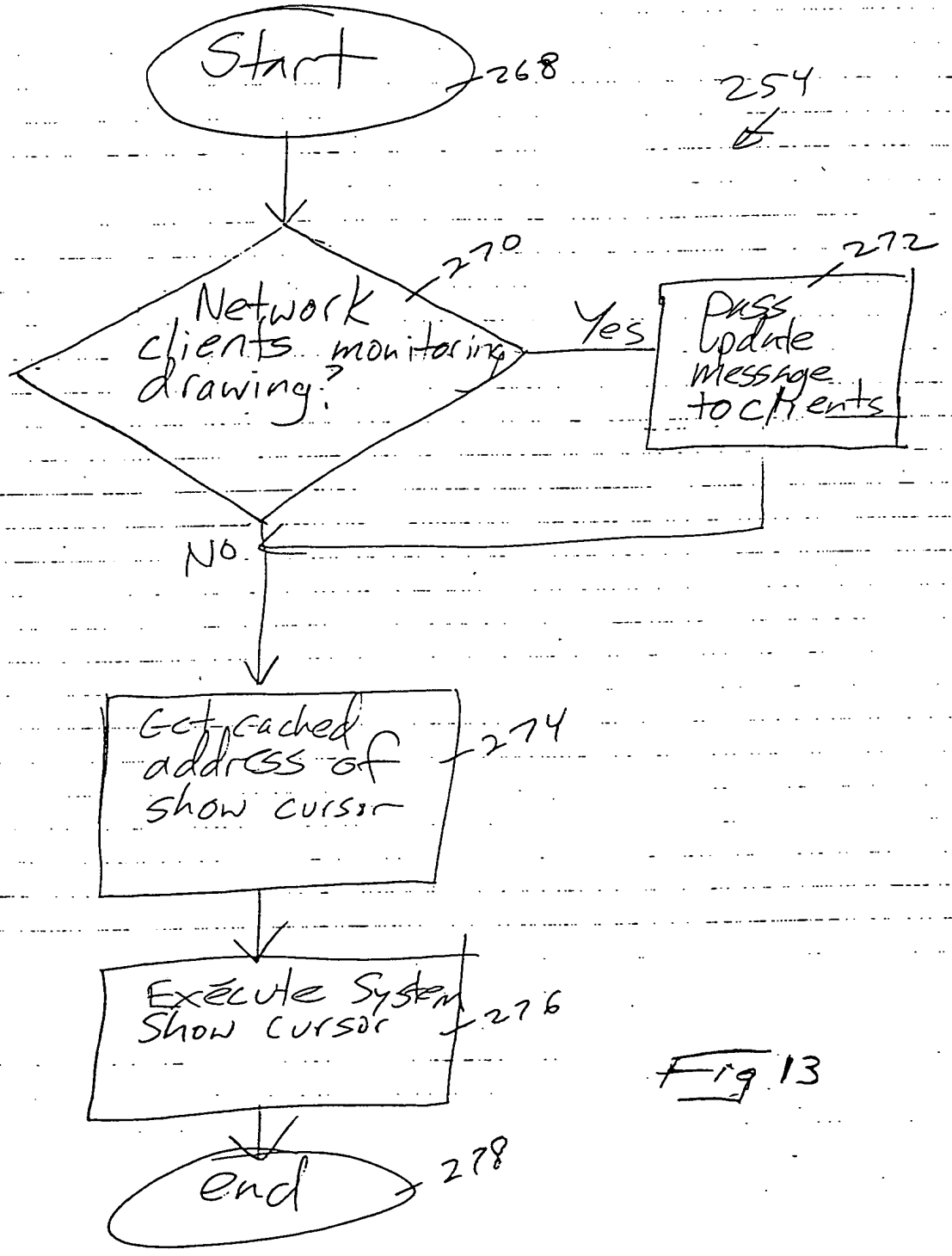


Fig 13

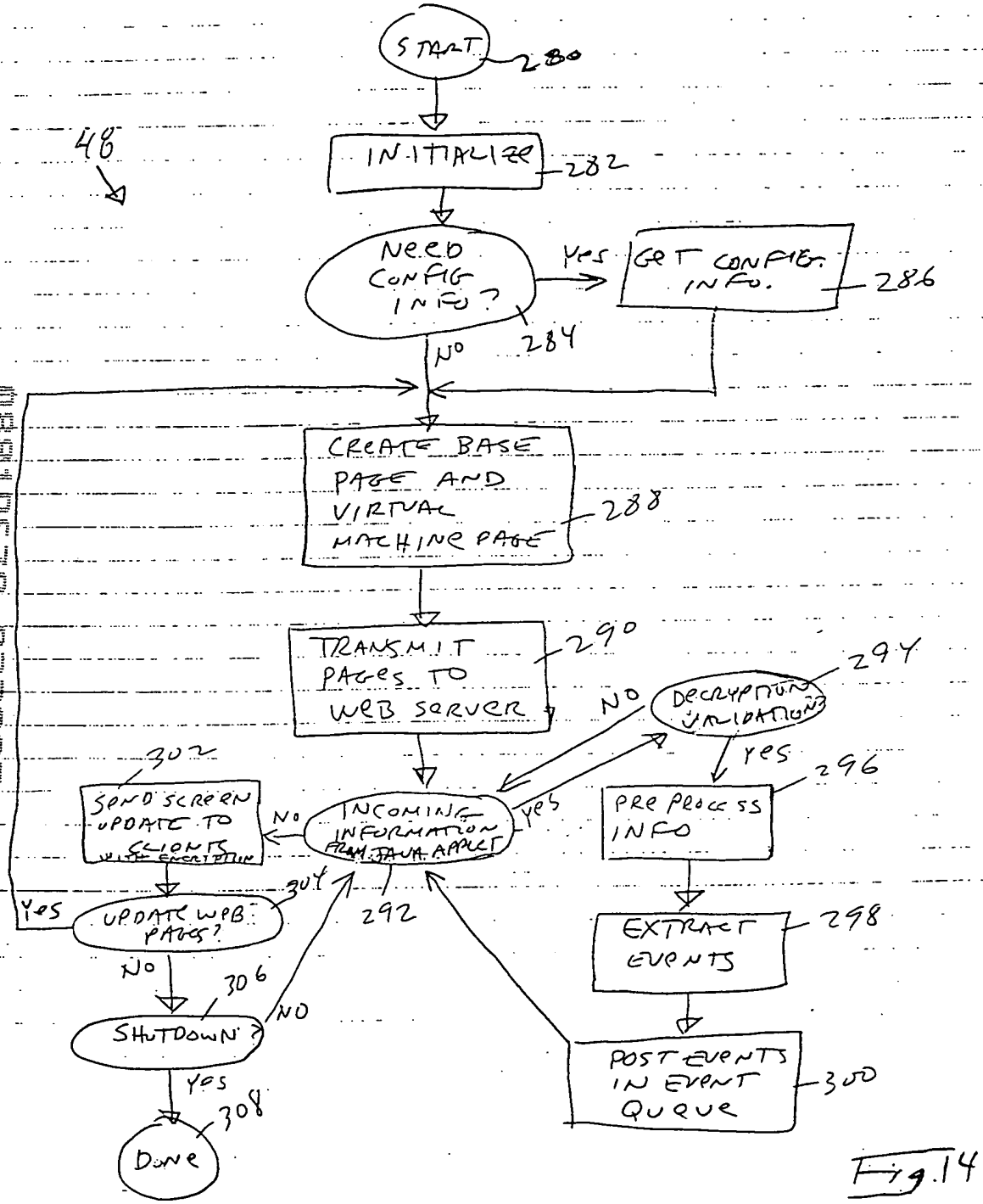

START
280
46
INITIALIZE
282
NEED CONFIG INFO?
284
Yes
GET CONFIG. INFO.
286
No
CREATE BASE PAGE AND VIRTUAL MACHINE PAGE
288
TRANSMIT PAGES TO WEB SERVER
290
DECRYPTION VALIDATION?
294
No
Yes
INCOMING INFORMATION FROM JAVA APPLET
292
Yes
No
SEND SCREEN UPDATE TO CLIENTS WITH ENCRYPTION
302
PRE PROCESS INFO
296
UPDATE WEB PAGES?
304
Yes
No
EXTRACT EVENTS
298
SHUTDOWN?
306
No
Yes
POST EVENTS IN EVENT QUEUE
300
DONE
308

Fig. 14

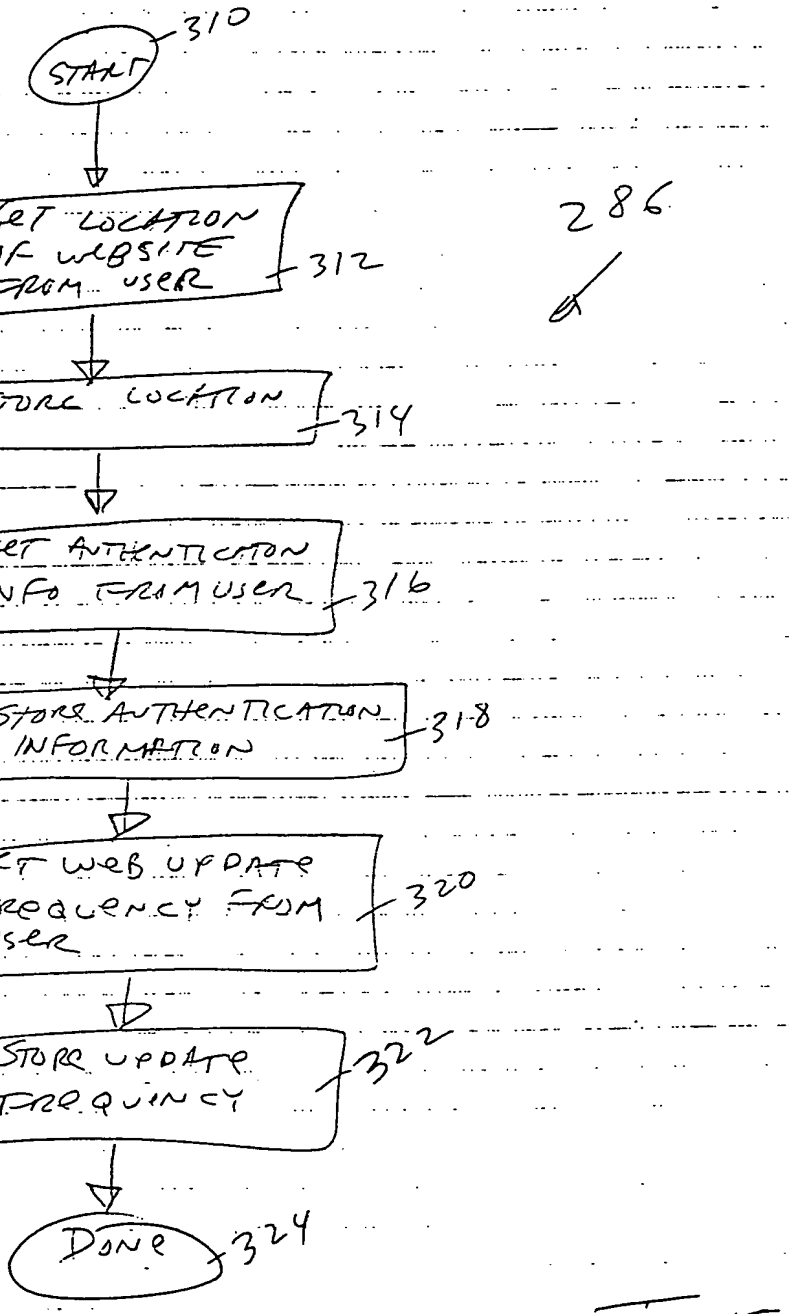

310
START
GET LOCATION OF WEBSITE FROM USER
312
286
STORE LOCATION
314
GET AUTHENTICATION INFO FROM USER
316
STORE AUTHENTICATION INFORMATION
318
GET WEB UPDATE FREQUENCY FROM USER
320
STORE UPDATE FREQUENCY
322
DONE
324

Fig. 15

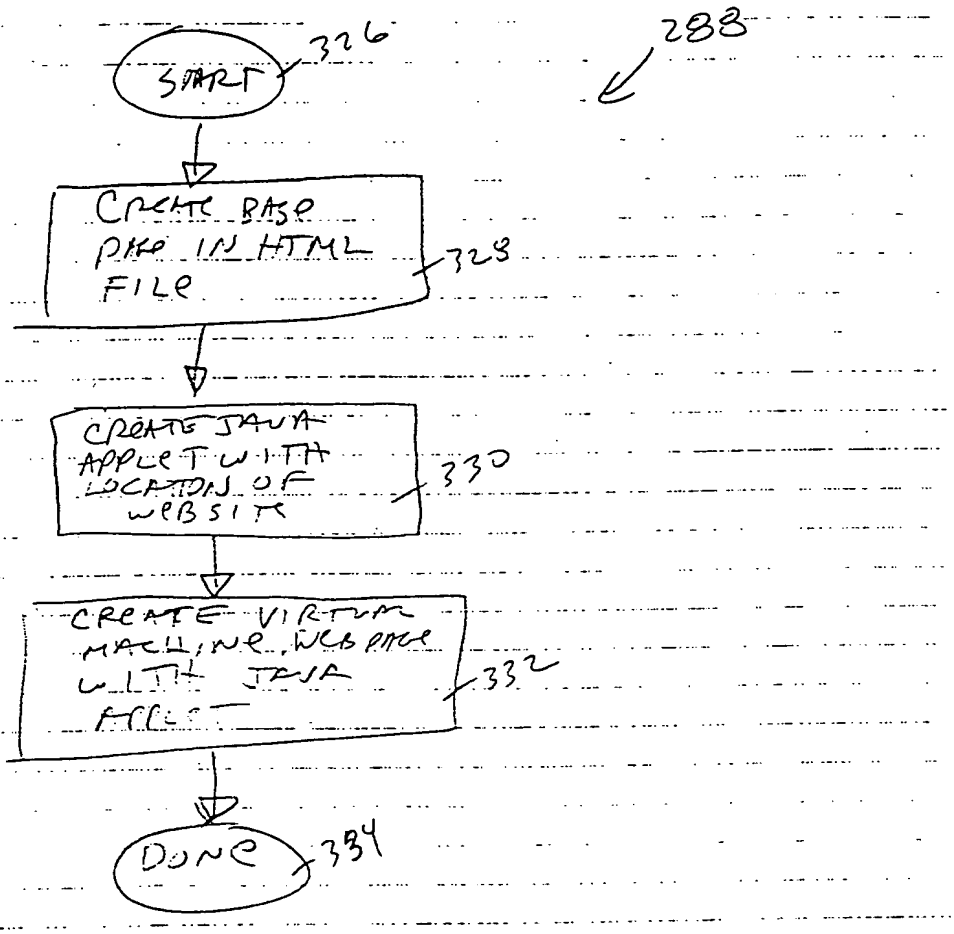
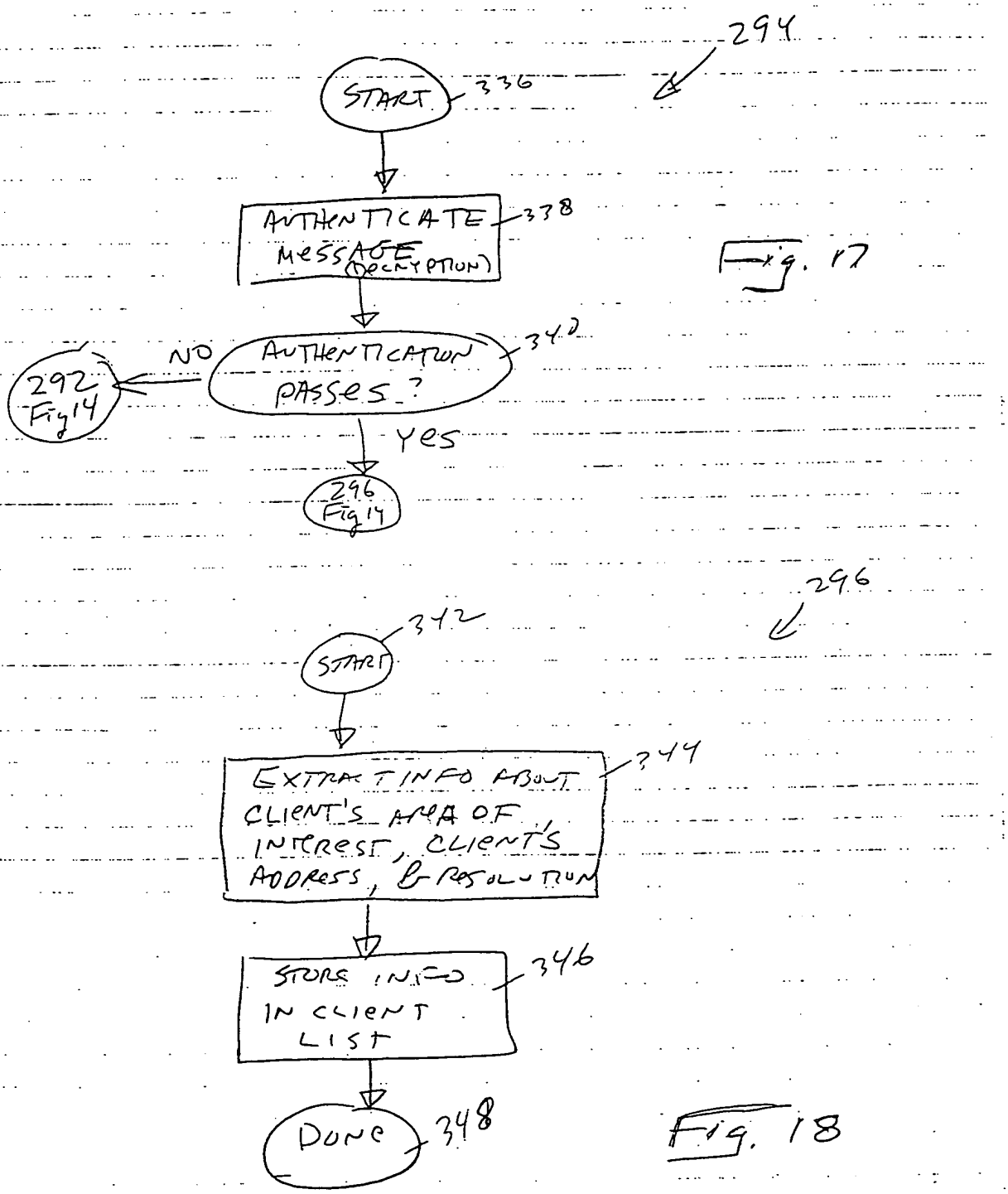

START
326
288
CREATE BASE PAGE IN HTML FILE
328
CREATE JAVA APPLET WITH LOCATION OF WEBSITE
330
CREATE VIRTUAL MACHINE WEB PAGE WITH JAVA APPLET
332
DONE
334

Fig. 16


294
START
336
AUTHENTICATE MESSAGE (DECRYPTION)
338
Fig. 17
AUTHENTICATION PASSES?
340
NO
292 Fig 14
YES
296 Fig 14
296
START
342
EXTRACT INFO ABOUT CLIENT'S AMA OF INTEREST, CLIENT'S ADDRESS, & RESOLUTION
344
STORE INFO IN CLIENT LIST
346
DONE
348
Fig. 18

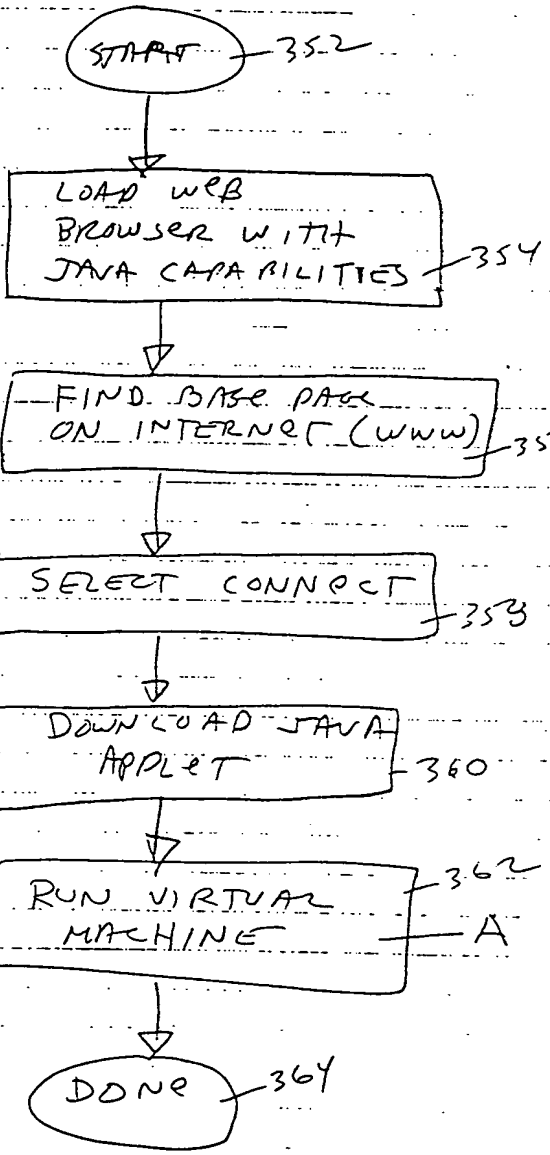

START
352
350
LOAD WEB BROWSER WITH JAVA CAPABILITIES
354
FIND BASE PAGE ON INTERNET (WWW)
356
SELECT CONNECT
358
DOWNLOAD JAVA APPLET
360
RUN VIRTUAL MACHINE
362
A
DONE
364

Fig. 19

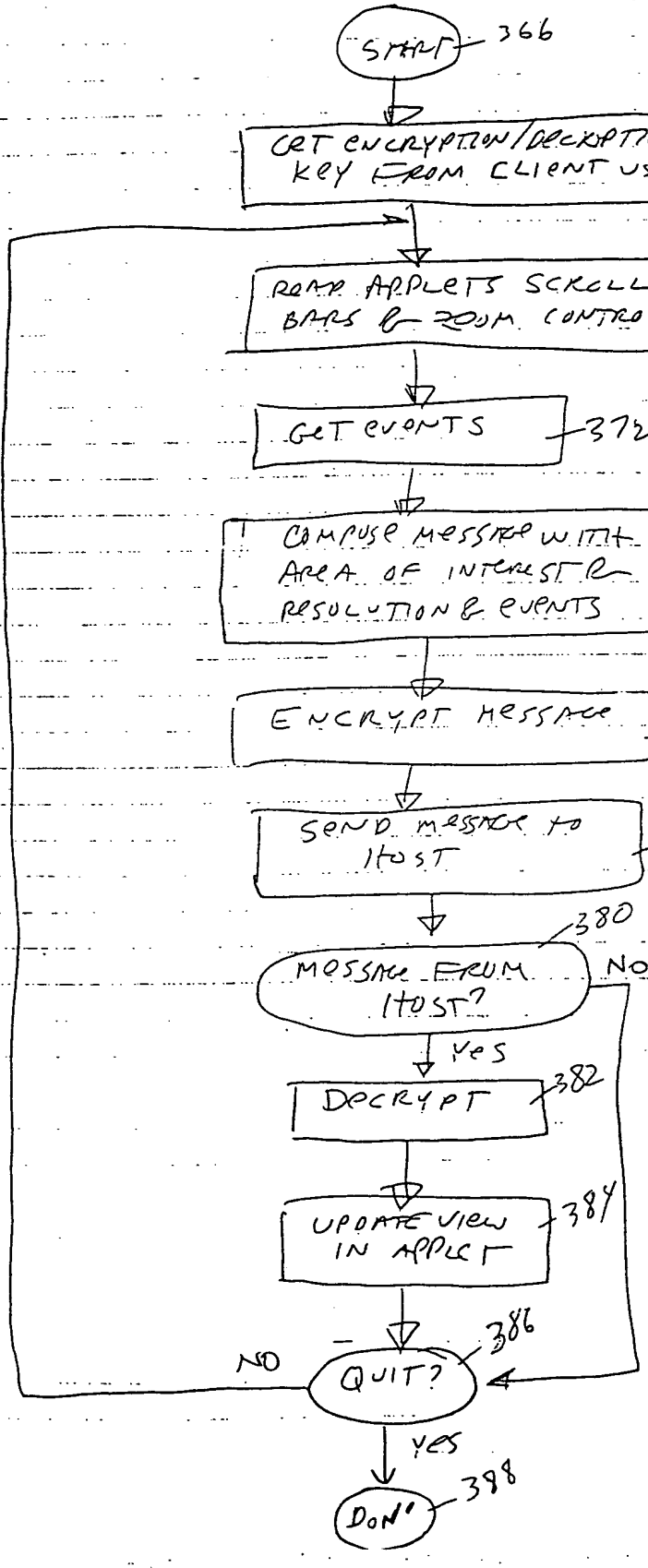

START
366
GET ENCRYPTION/DECRYPTION KEY FROM CLIENT USER
368
362
RUN APPLETS SCROLL BARS & ZOOM CONTROL
370
GET EVENTS
372
COMPOSE MESSAGE WITH AREA OF INTEREST RESOLUTION & EVENTS
374
ENCRYPT MESSAGE
376
SEND MESSAGE TO HOST
378
MESSAGE FROM HOST?
380
NO
YES
DECRYPT
382
UPDATE VIEW IN APPLET
384
QUIT?
386
NO
YES
DON'
388

Fig. 20

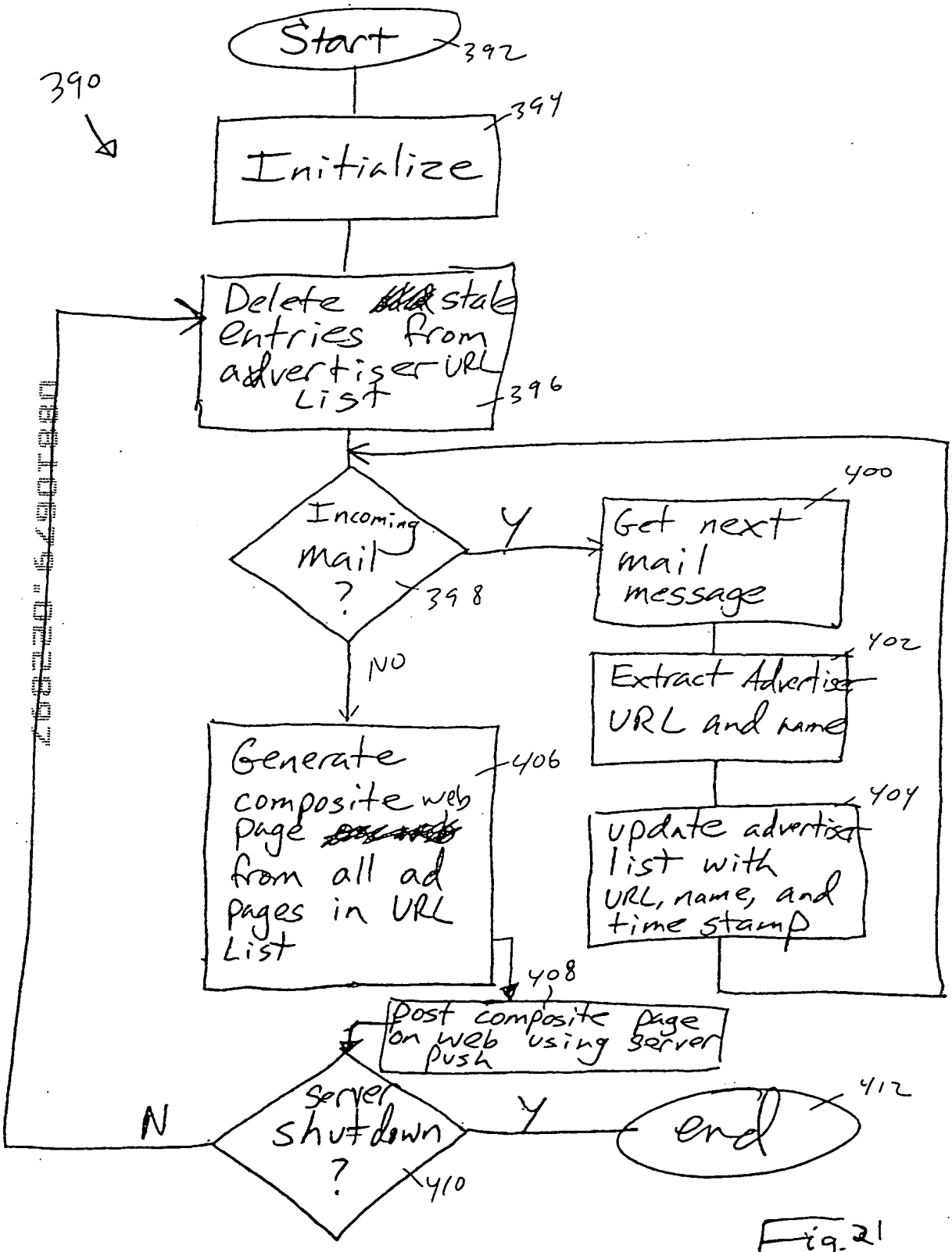

390
Start
392
Initialize
394
Delete stale entries from advertiser URL List
396
Incoming mail ?
398
Y
NO
Get next mail message
400
Extract Advertiser URL and name
402
update advertiser list with URL, name, and time stamp
404
Generate composite web page from all ad pages in URL List
406
Post composite page on web using server push
408
server shutdown ?
410
N
Y
end
412

Fig. 21

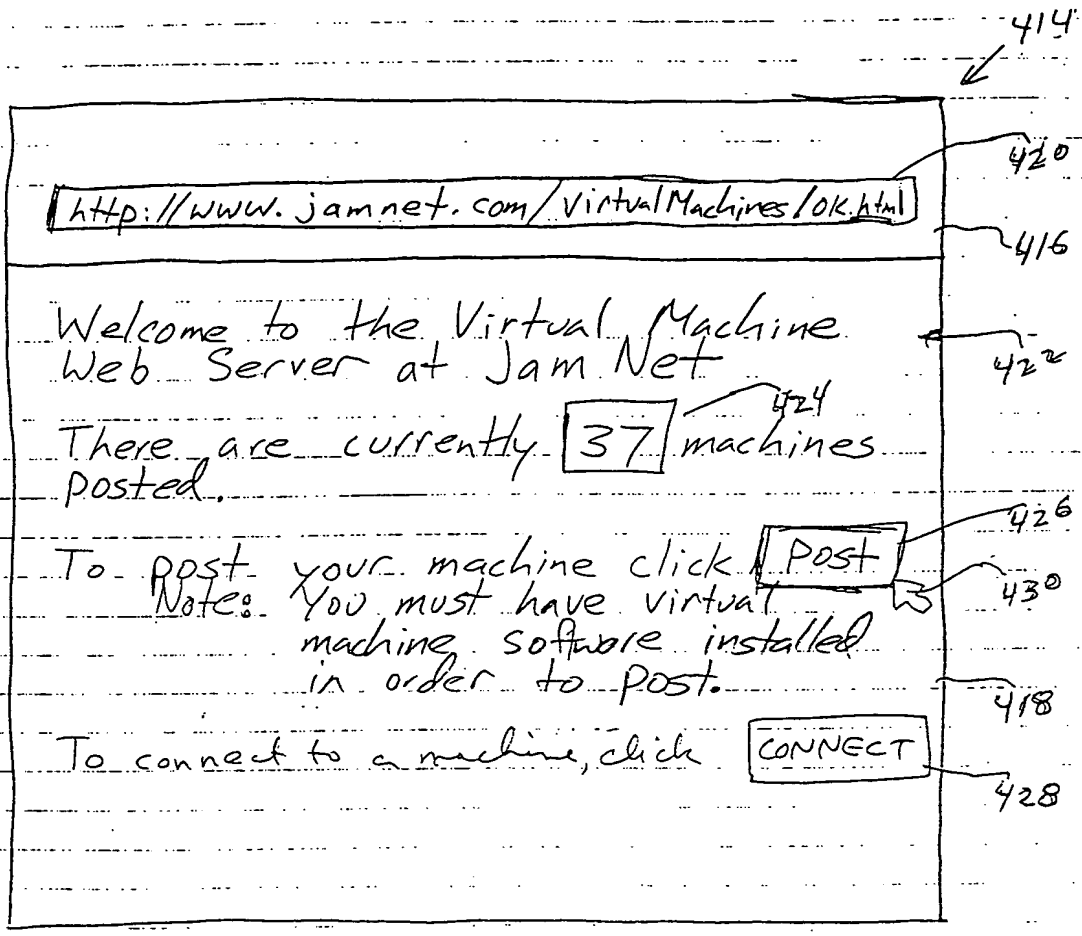

414
http://www.jamnet.com/virtualMachines/ok.html
420
416
Welcome to the Virtual Machine Web Server at Jam Net
422
There are currently 37 machines posted.
424
To post your machine click Post
426
Note: You must have virtual machine software installed in order to post.
430
To connect to a machine, click CONNECT
418
428

Fig. 22a

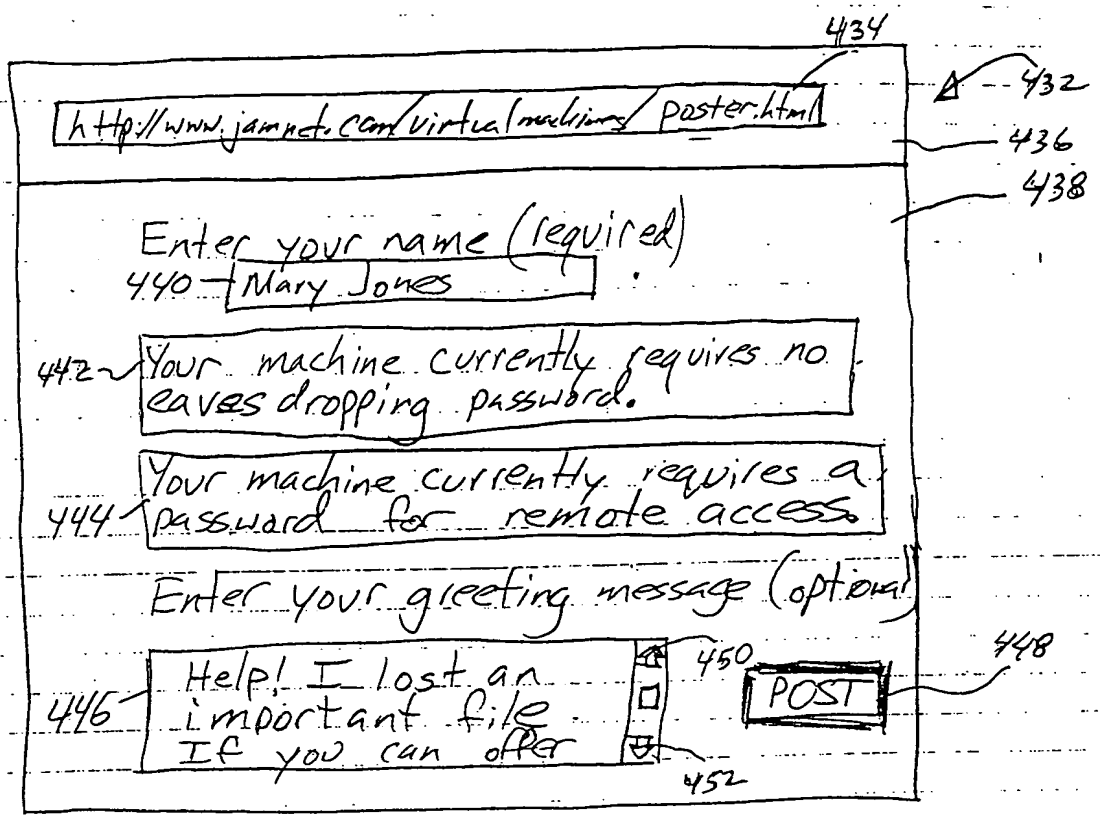


Fig 22b

08/20/98, EV505087985

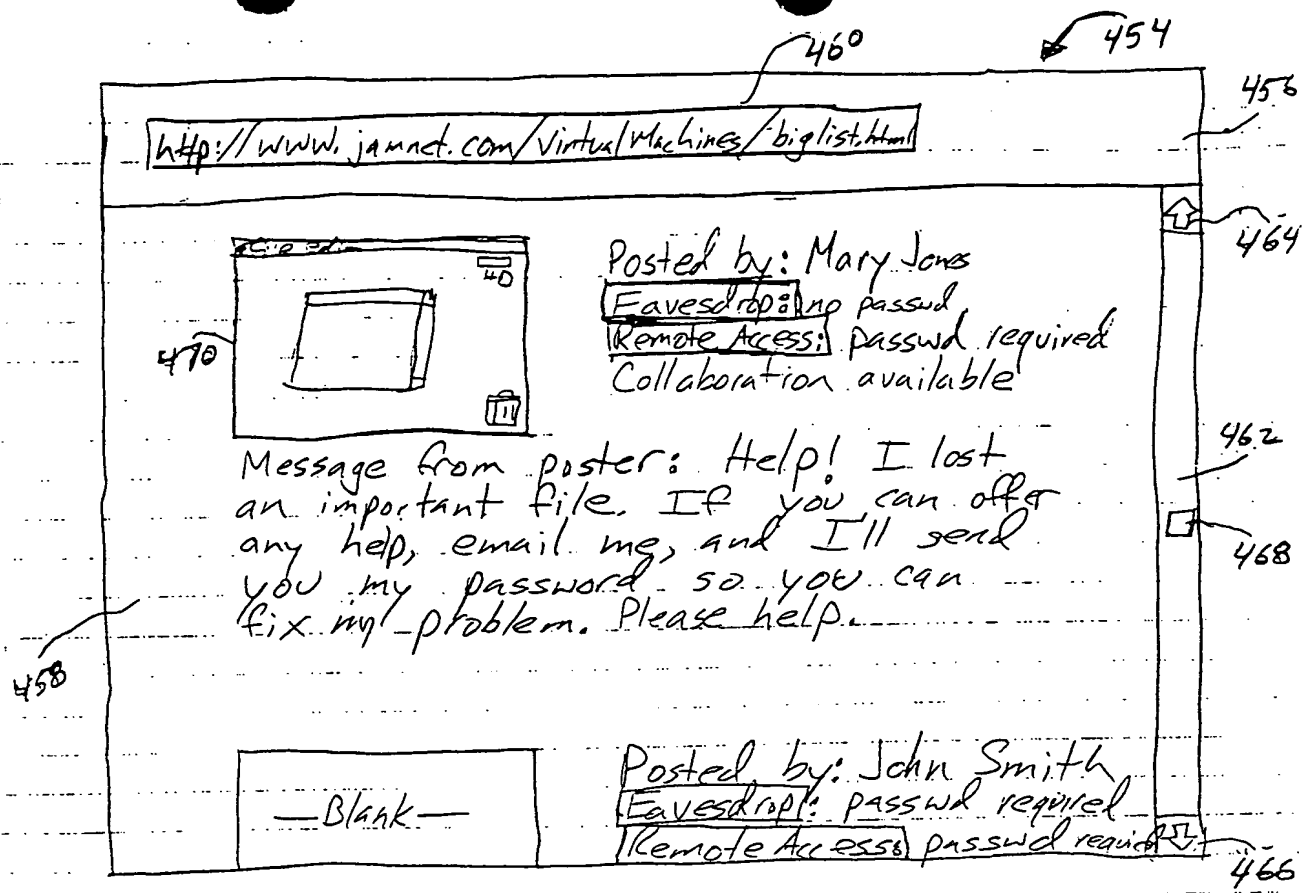
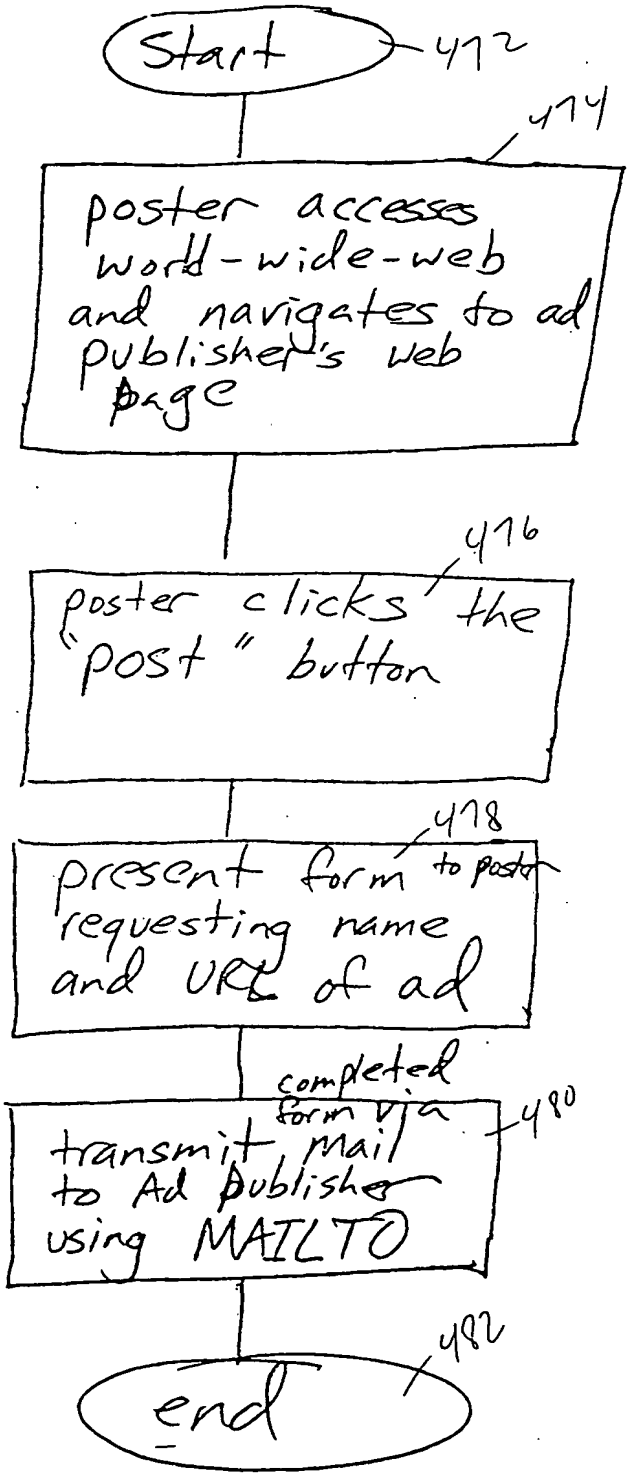


Fig 22C

08876908.0220


Start
472
474
poster accesses world-wide-web and navigates to ad publisher's web page
476
poster clicks the "post" button
478
present form to poster requesting name and URL of ad
completed form via
480
transmit mail to Ad Publisher using MAILTO
482
end

481

Fig 23

6822C 6790880

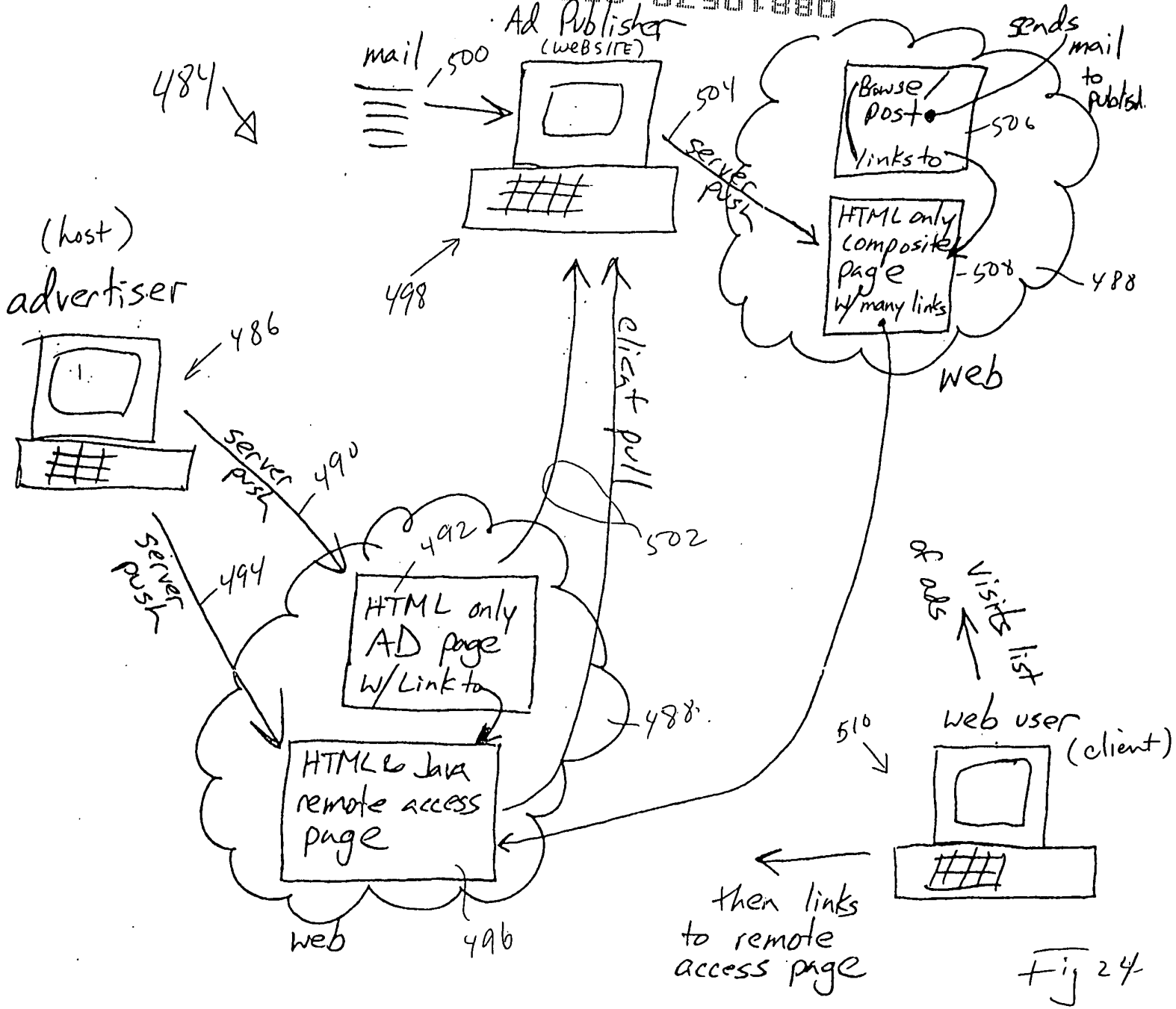


Fig 24

08810679 "268220

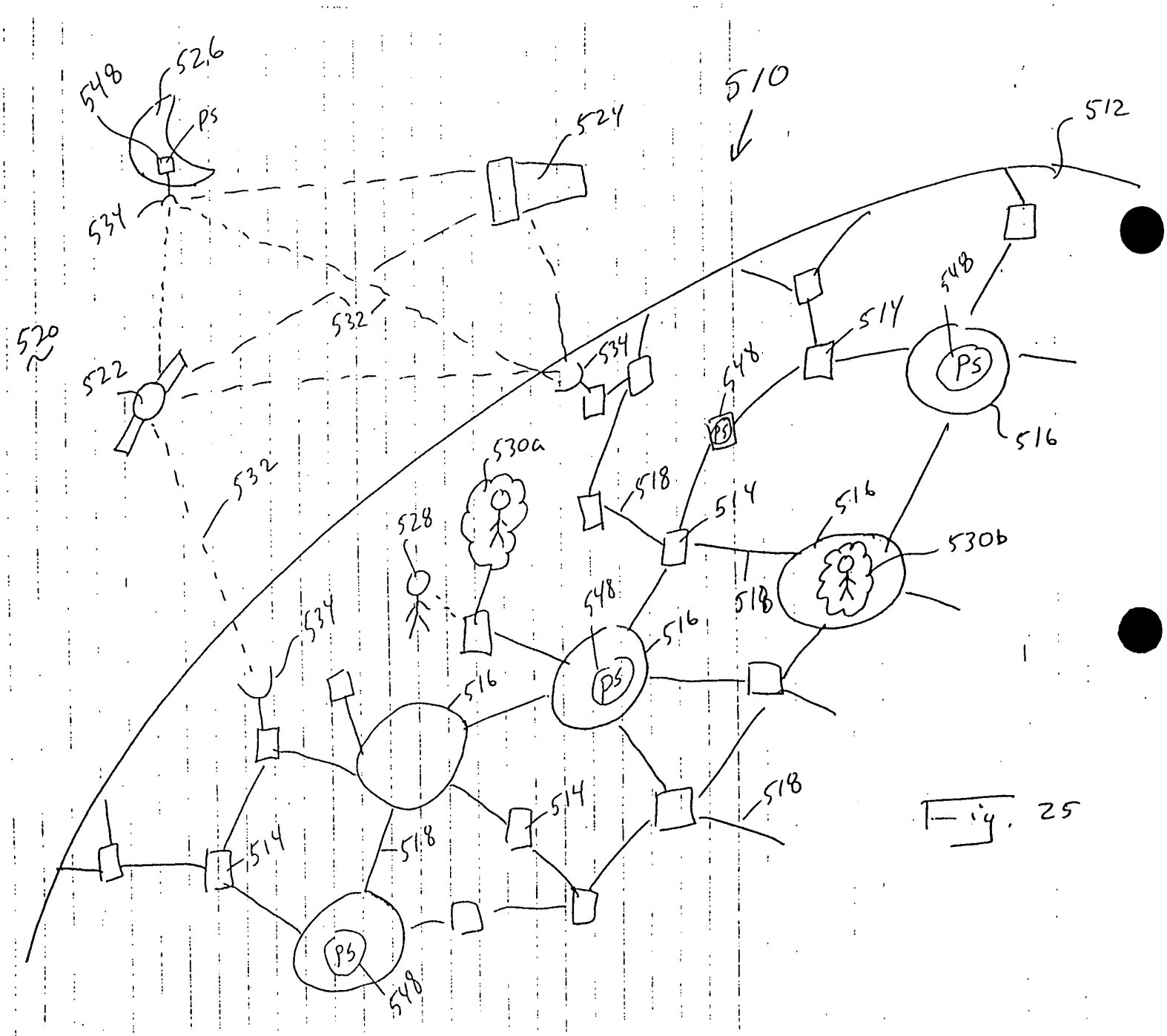


Fig. 25

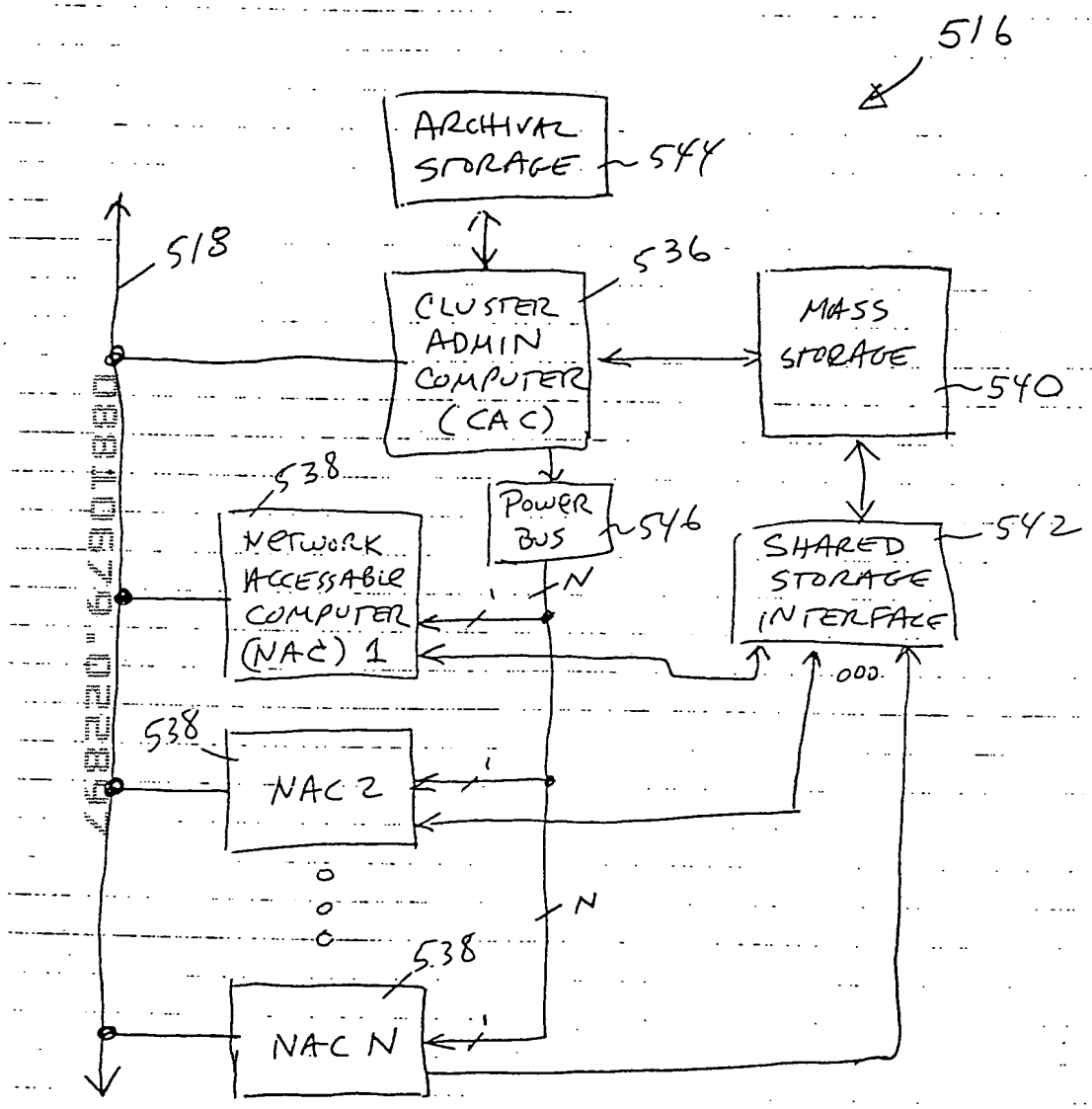

516
ARCHIVAL STORAGE
544
518
536
CLUSTER ADMIN COMPUTER (CAC)
MASS STORAGE
540
538
NETWORK ACCESSABLE COMPUTER (NAC) 1
POWER BUS
546
SHARED STORAGE INTERFACE
542
N
538
NAC 2
N
538
NAC N

Fig. 26

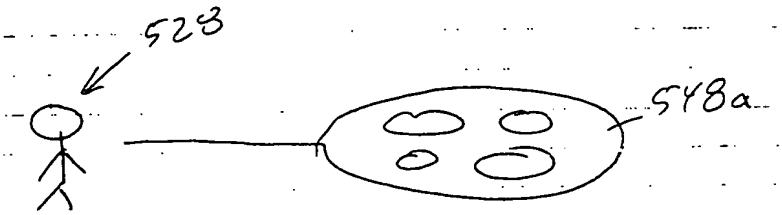
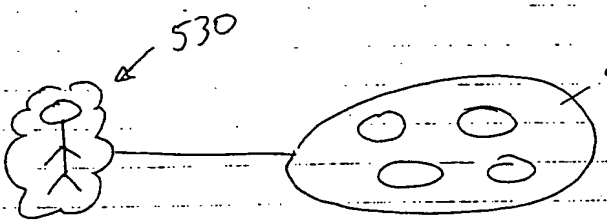

528
548a

Fig. 27


530
548b

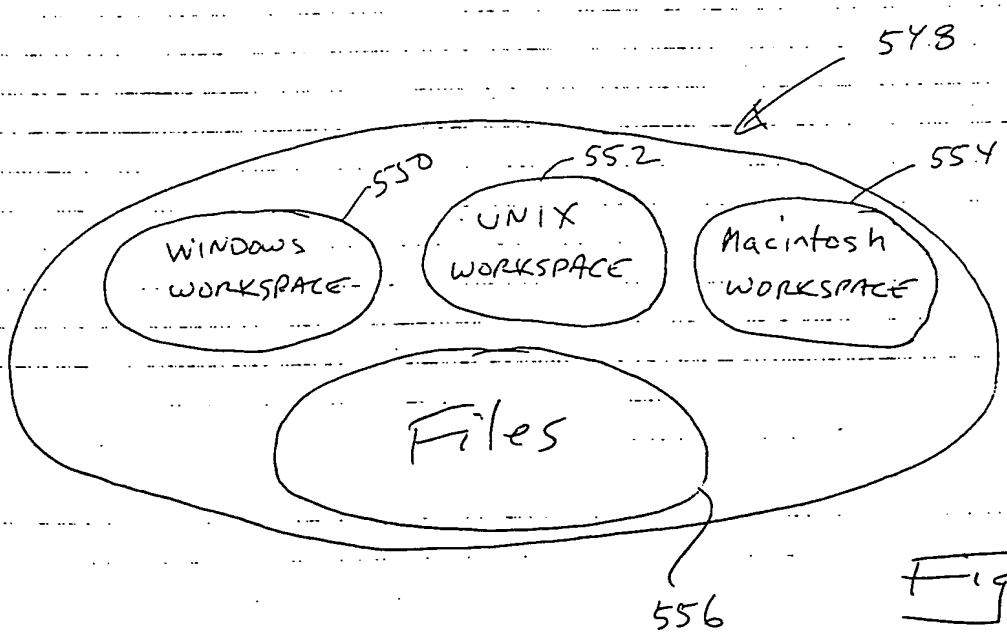

548
550
552
554
WINDOWS WORKSPACE
UNIX WORKSPACE
Macintosh WORKSPACE
Files
556

Fig. 28

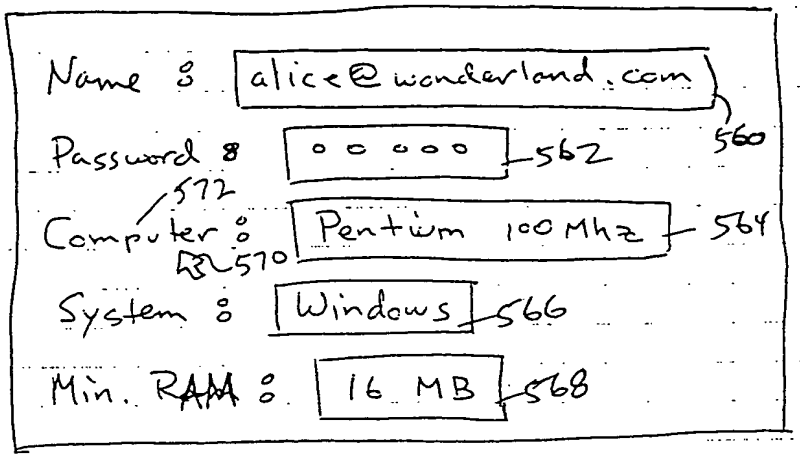


Fig. 29

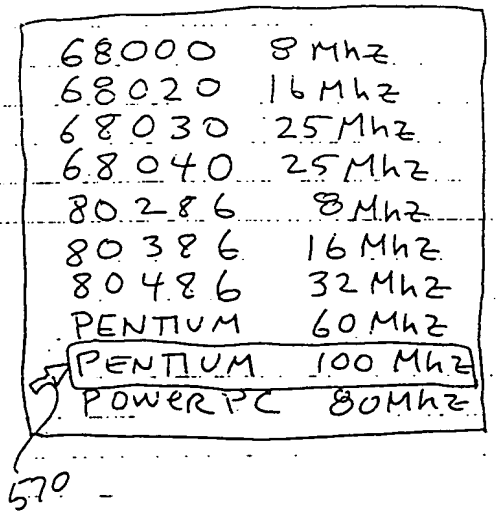


Fig. 29a

08105769.022697

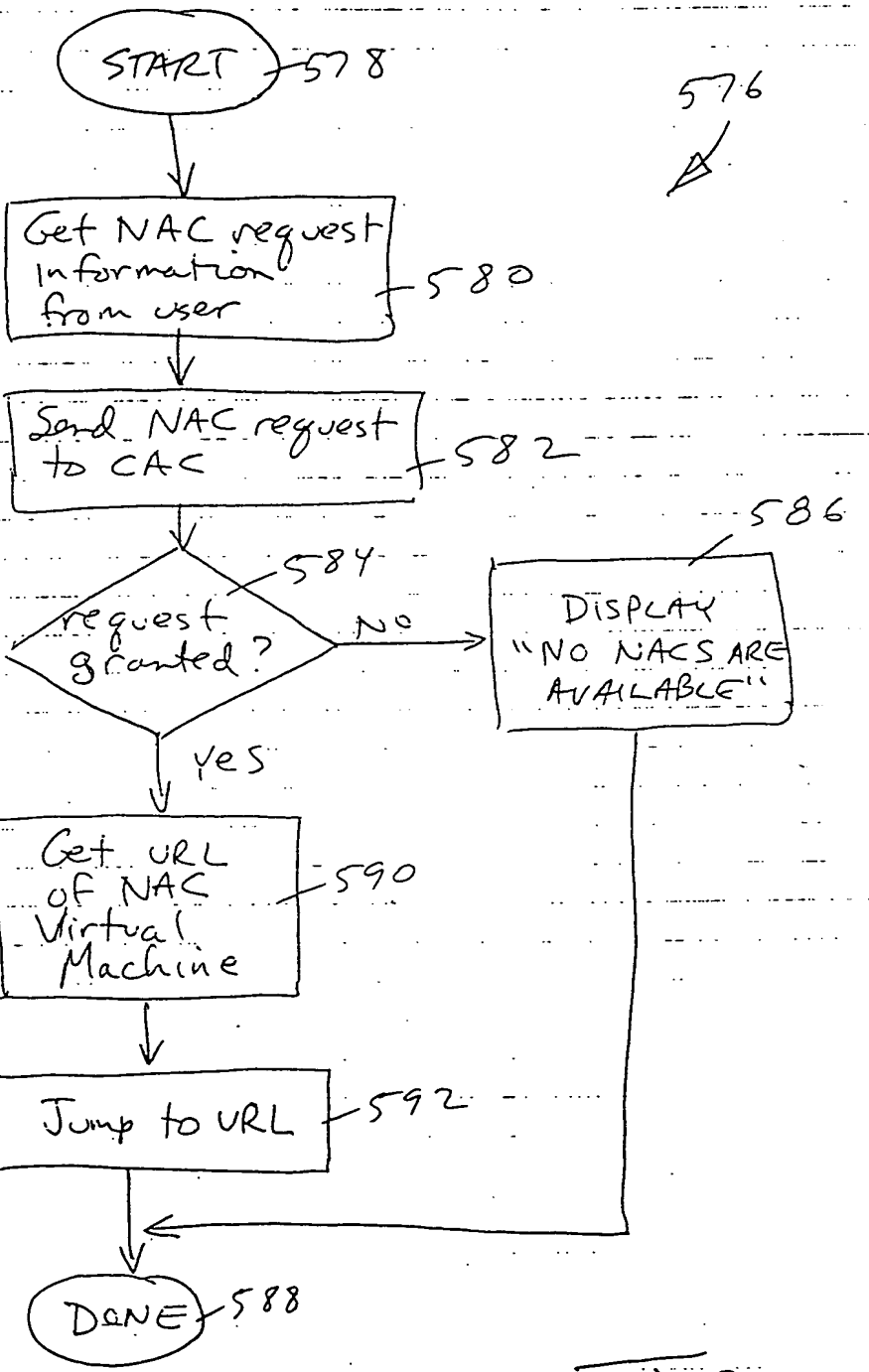

START
578
576
Get NAC request information from user
580
Send NAC request to CAC
582
request granted?
584
No
586
DISPLAY "NO NACS ARE AVAILABLE"
Yes
Get URL of NAC Virtual Machine
590
Jump to URL
592
DONE
588

Fig. 30

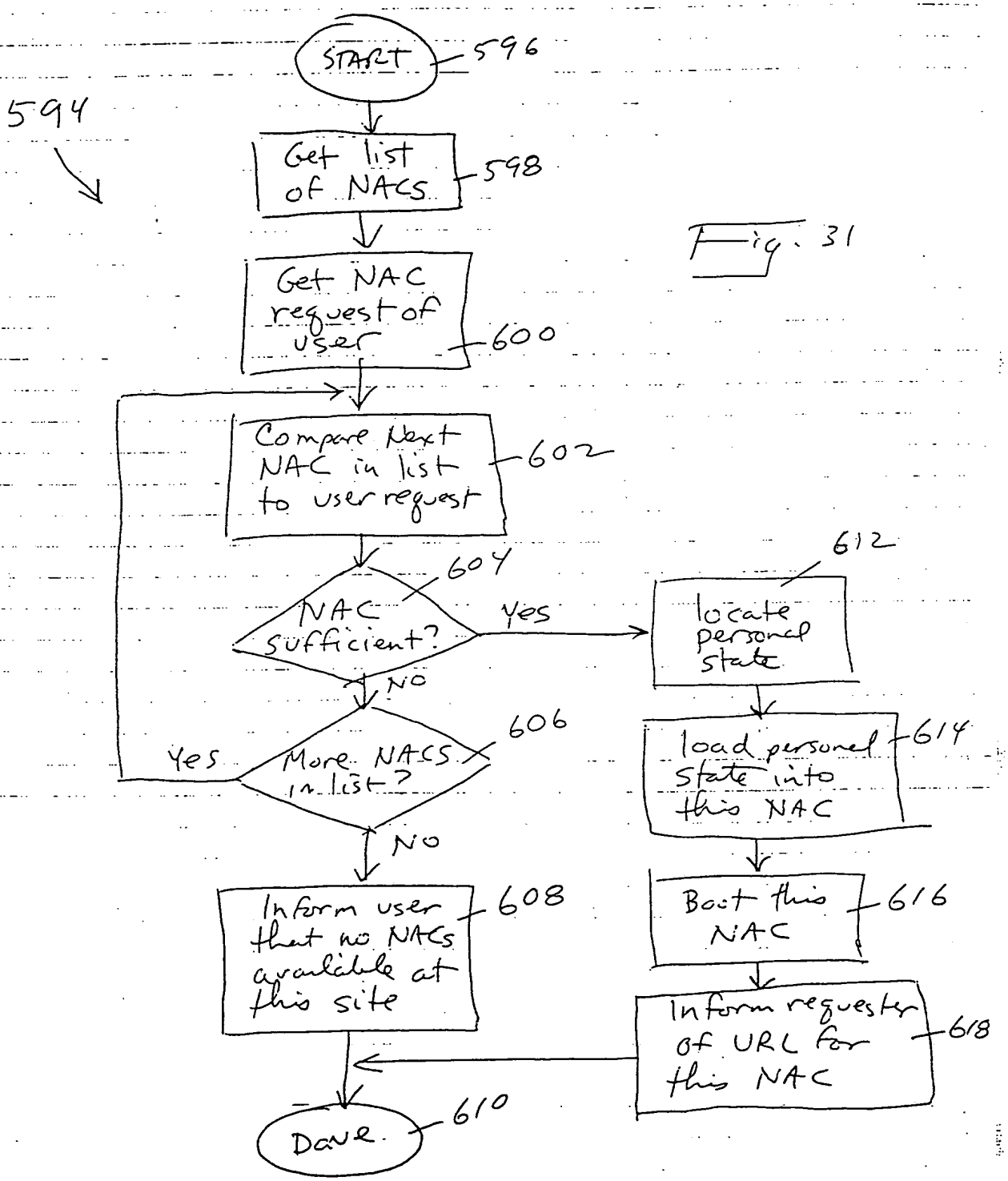


Fig. 31

DOCKET NO. 2000-0007

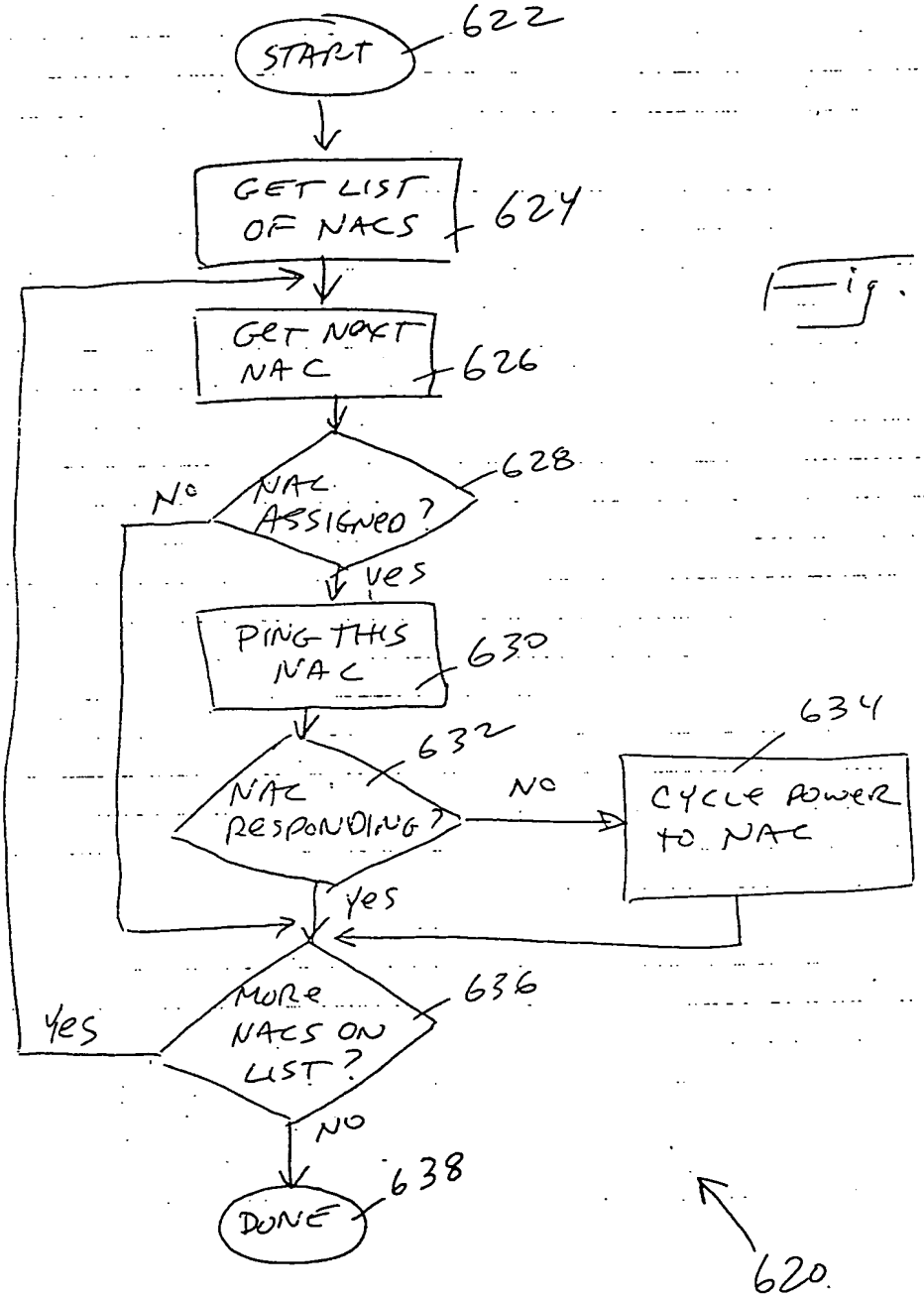

START
622
GET LIST OF NACS
624
GET NEXT NAC
626
NAC ASSIGNED?
628
No
Yes
PING THIS NAC
630
NAC RESPONDING?
632
No
CYCLE POWER TO NAC
634
Yes
MORE NACS ON LIST?
636
Yes
No
DONE
638
620

Fig. 32

08819769.0202868.9

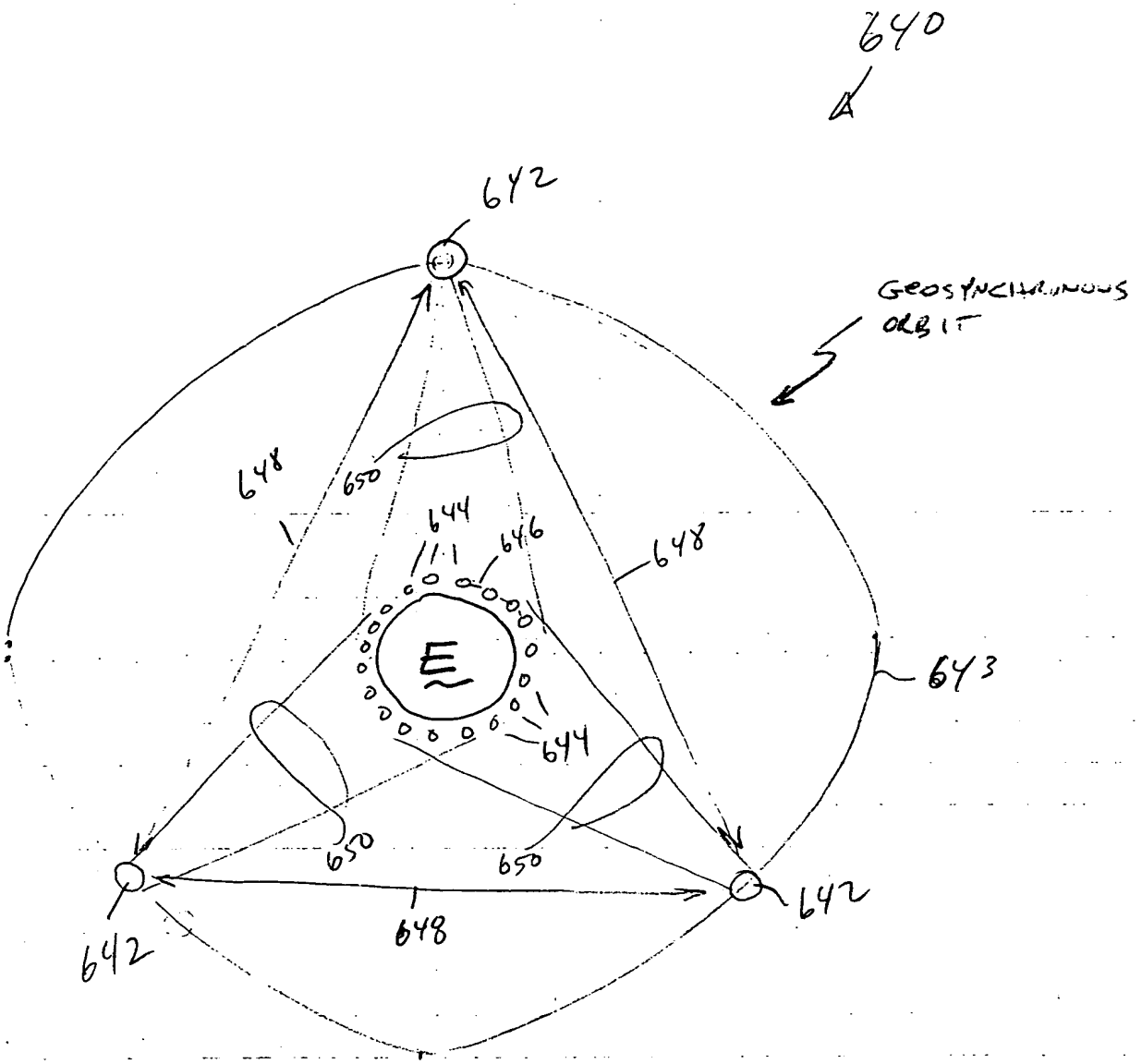


Fig 33

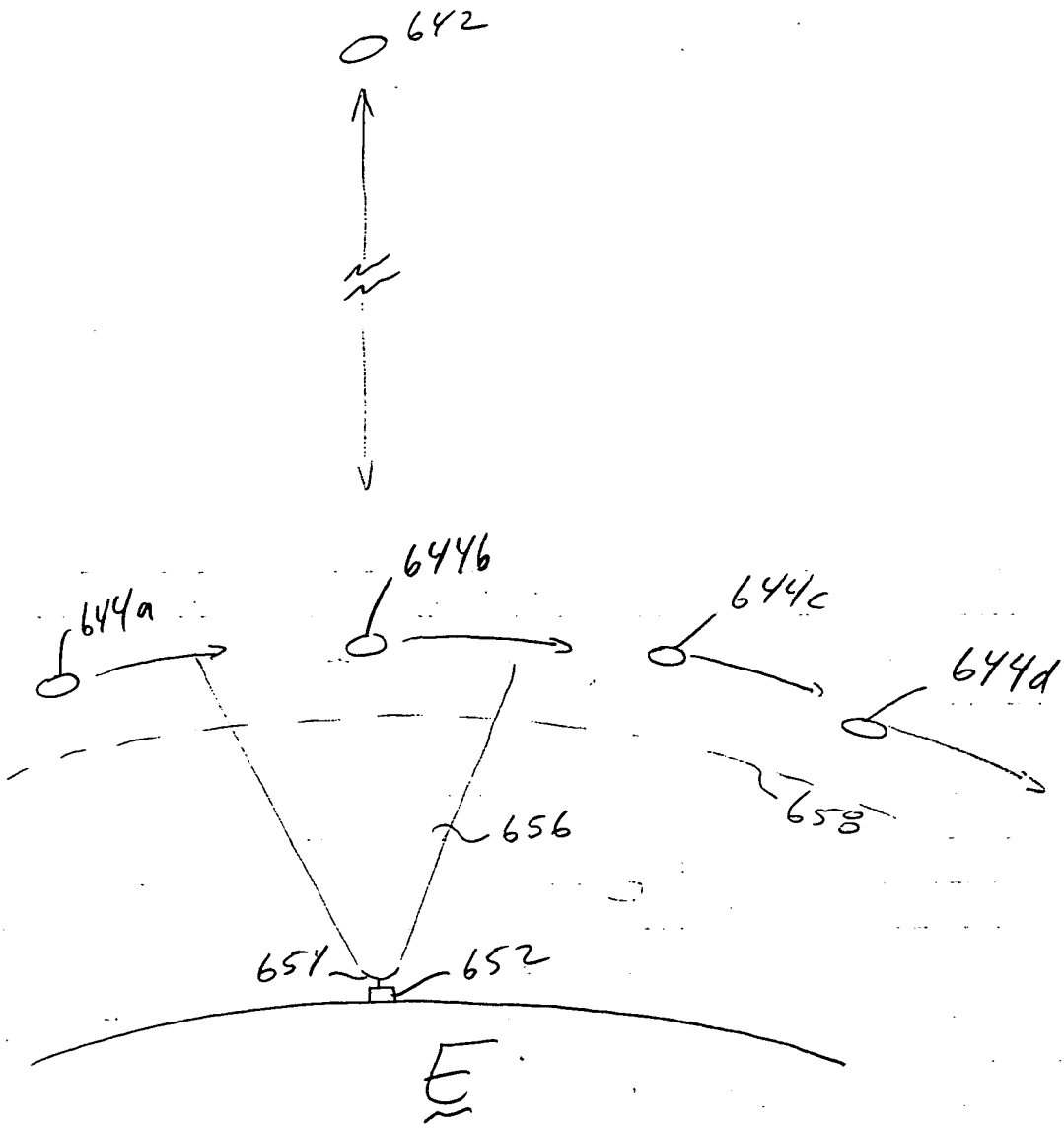


Fig. 34

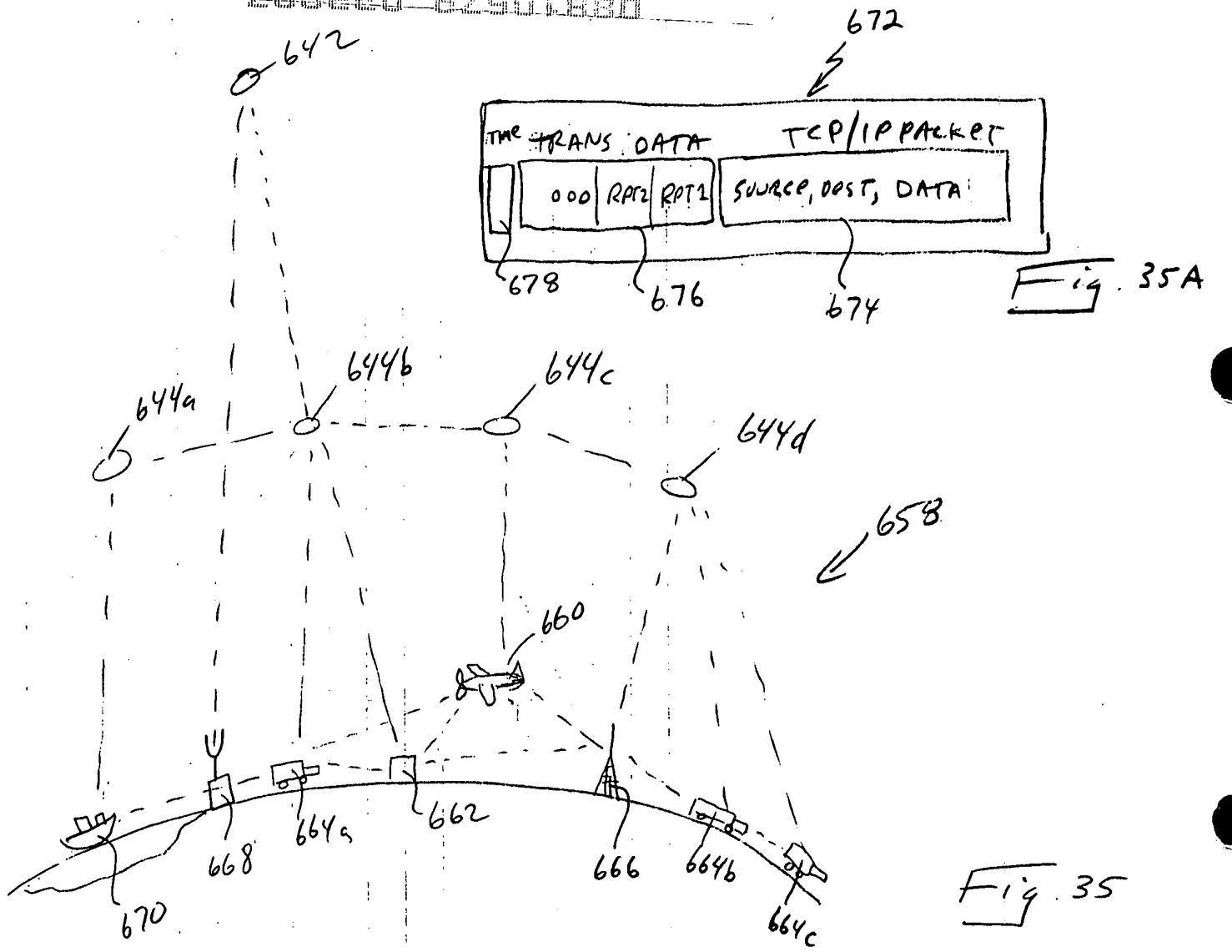


Fig. 35A

Fig. 35

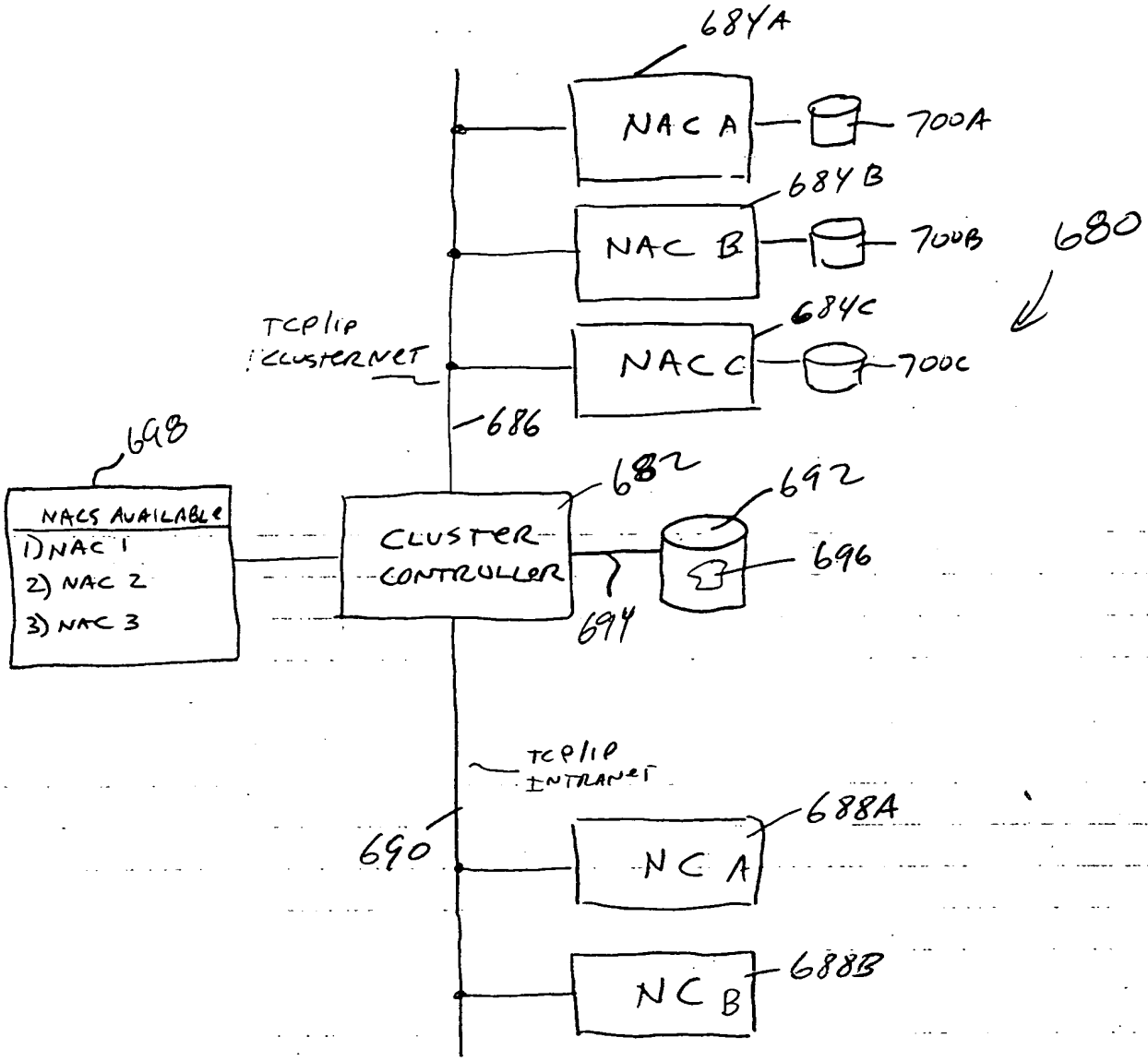


Fig. 36

09682769.020298

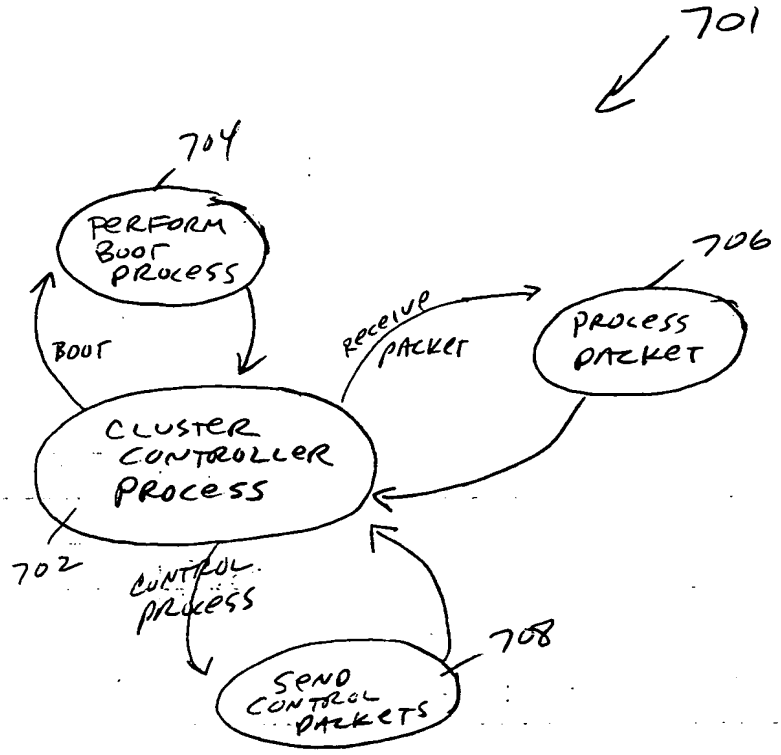

701
704
PERFORM BOOT PROCESS
706
PROCESS PACKET
BOOT
RECEIVE PACKET
CLUSTER CONTROLLER PROCESS
702
CONTROL PROCESS
708
SEND CONTROL PACKETS

Fig. 37

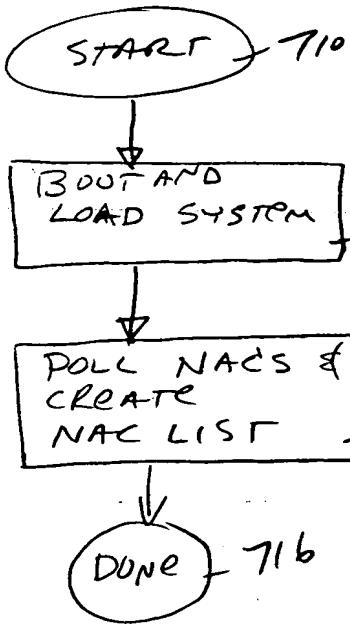


Fig. 38

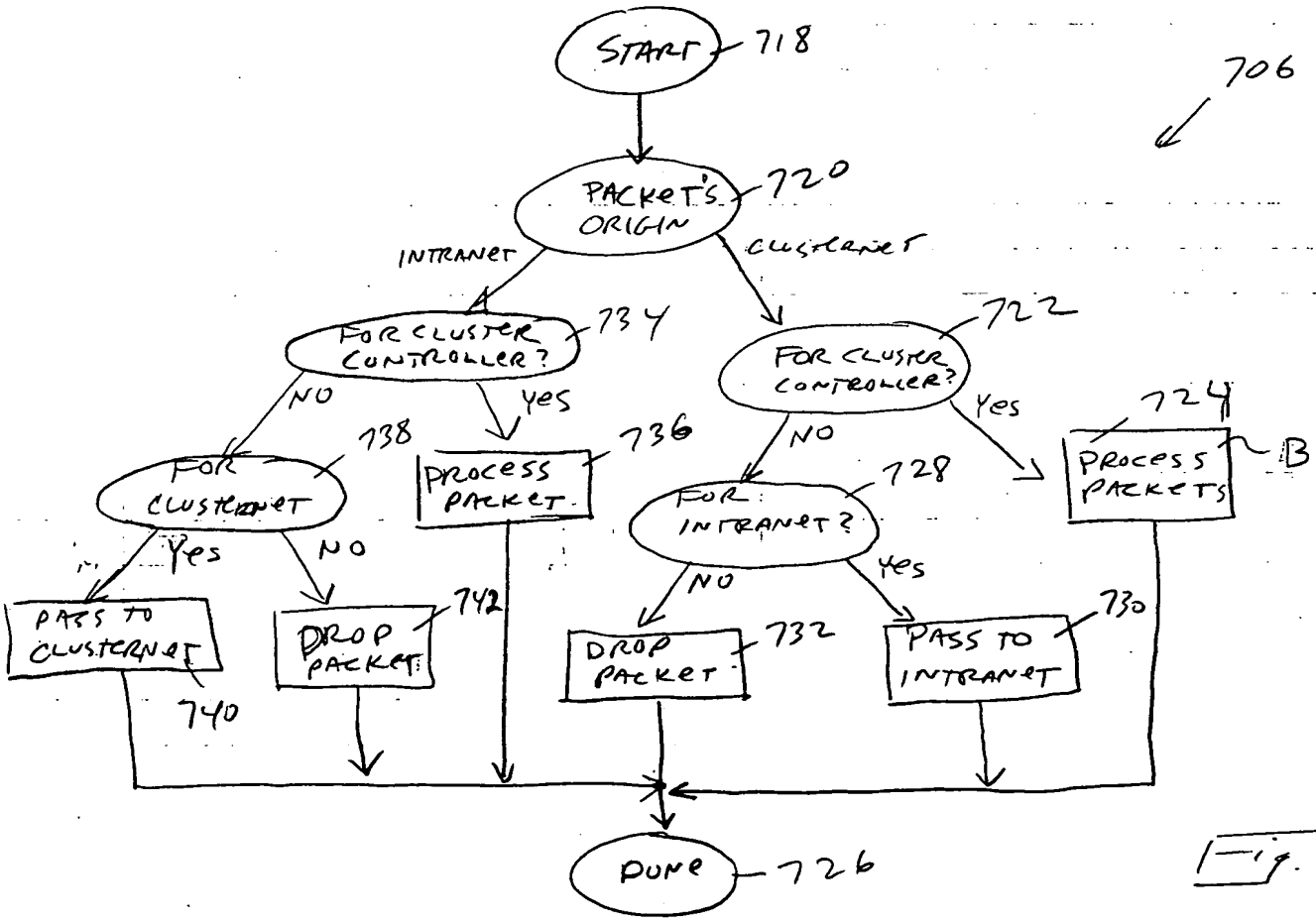


Fig. 39

08/20/96 6:50 PM

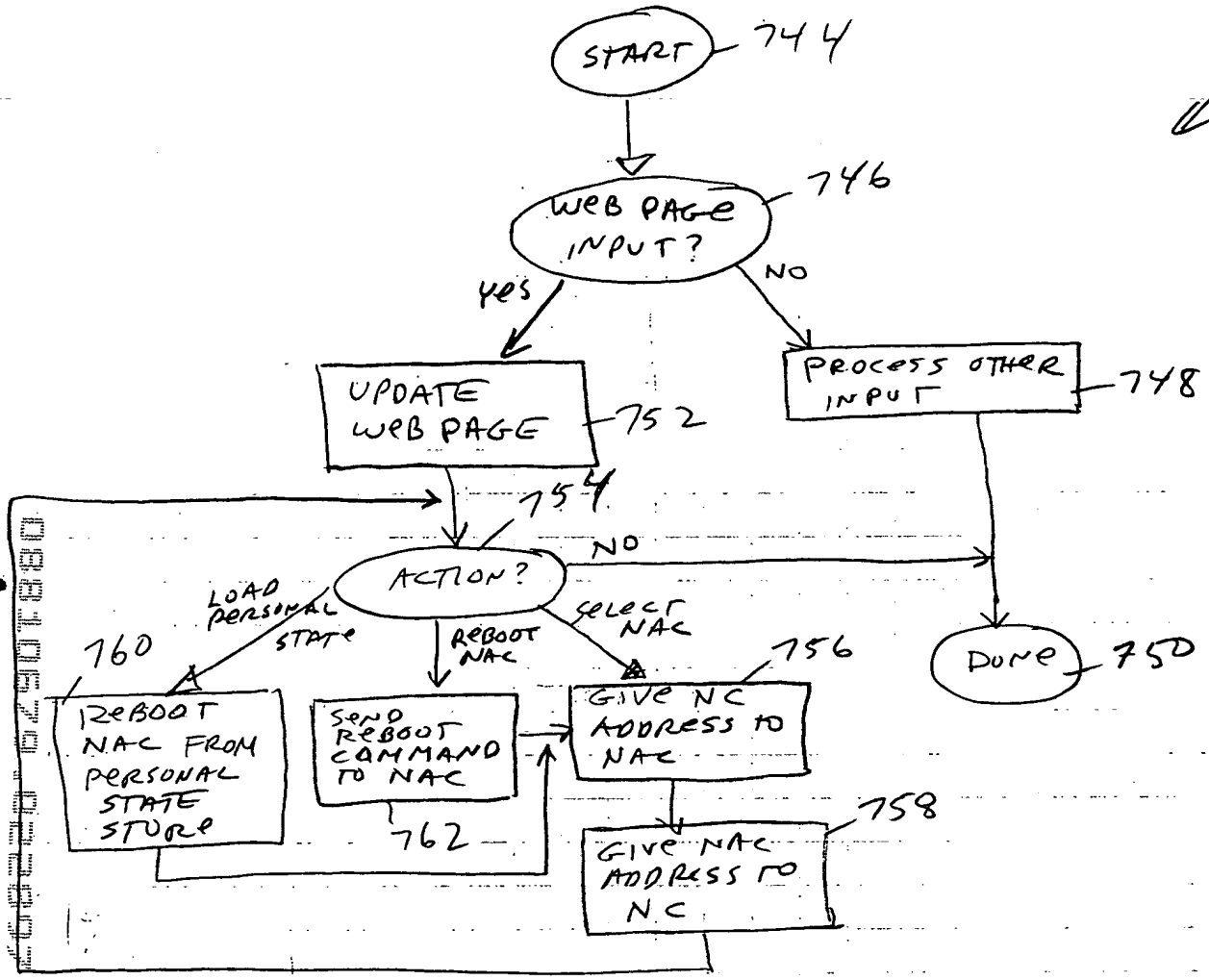

736
START
744
WEB PAGE INPUT?
746
YES
NO
UPDATE WEB PAGE
752
PROCESS OTHER INPUT
748
754
ACTION?
NO
LOAD PERSONAL STATE
REBOOT NAC
SELECT NAC
760
REBOOT NAC FROM PERSONAL STATE STORE
SEND REBOOT COMMAND TO NAC
762
GIVE NC ADDRESS TO NAC
756
GIVE NAC ADDRESS TO NC
758
DONE
750

Fig. 40

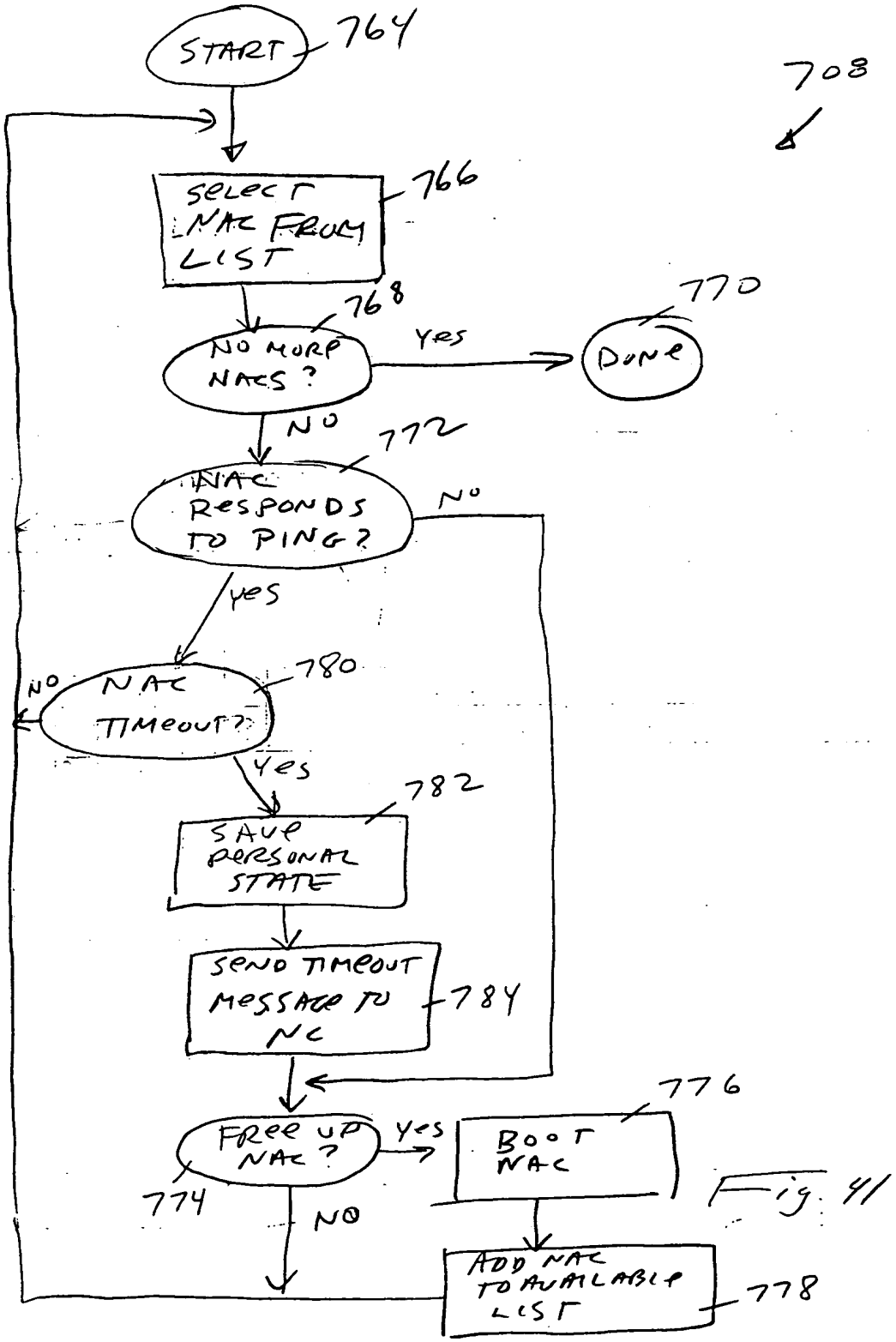


Fig. 41

08810570.022807

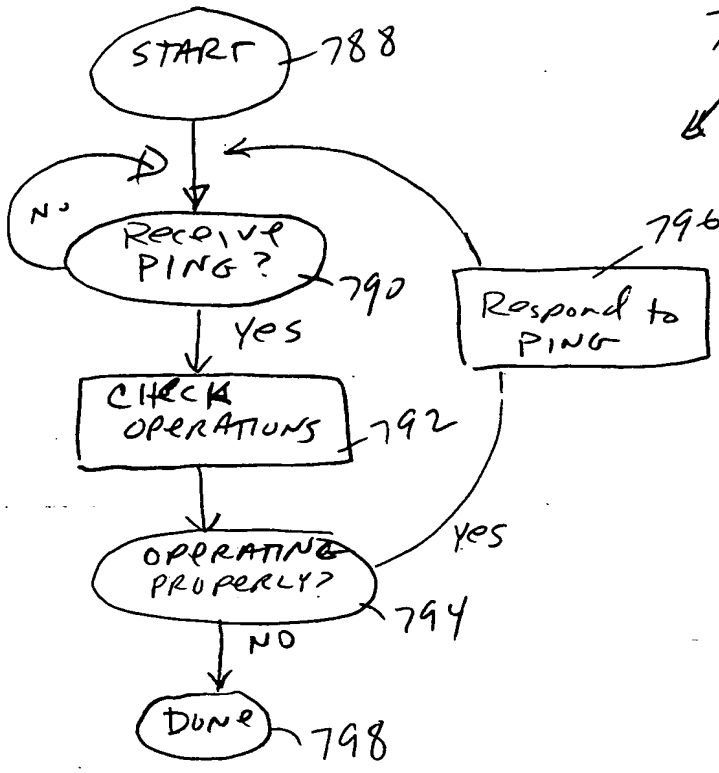


Fig 42

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